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ABSTRACT

Research on limited English proficient (LEP) students that was funded under the federal Bilingual Education Act (Title VII) and conducted from 1980-92 are summarized and reviewed. An introductory section gives an overview of the Department of Education's Office of Bilingual Education and Minority Languages Affairs and background in the Title VII research agenda, describes the goals of the literature review, the nature of the reports included, and the review process, and provides a framework based on themes in educational research in general, used for organizing and comparing the studies. Subsequent chapters summarize findings concerning students, teachers, instruction, program administration, and research methods in bilingual education. A final chapter offers an overall summary and conclusions, including recommendations for specific additional studies. Appended materials include an alphabetical listing, by author, of studies reviewed and references cited, a chronological listing of the studies, with annotations, and an overview of methodologies used in federally-funded research studies. (MSE)

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Literature Review of Federally Funded Studies Related to LEP Students

Final Analytic Report

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Literature Review of Federally Funded Studies Related to LEP Students

Final Analytic Report

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Literature Review of Federally Funded Studies Related to LEP Students

Final Analytic Report

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I. INTRODUCTION

Our nation's schools are facing an ever increasing enrollment of language minority students who enter schools without full proficiency in English (McCarty and Carrera, 1988). These demographic changes require that schools address the needs of a student population that daily grows more diverse (De La Rosa and Maw, 1990; McCarty and Carrera, 1988; U.S. Department of Education, 1990). The challenge that these student groups present is often a new one for administrators and teachers, many of whom were trained and have gained their expertise in a world in which non-minority, English-proficient, middle-class students were the rule. These administrators and teachers need guidance and additional resources to assist them in working effectively with their limited English proficient (LEP) students.

Building the capacity of schools and districts to effectively serve limited English proficient students will be increasingly important in the years ahead. Such capacity-building is a primary objective of the various programs administered by the Office of Bilingual Education and Minority Languages Affairs (OBEMLA), U.S. Department of Education, and funded under Title VII (the Bilingual Education Act), PL100-297.

As part of its ongoing process of assessing need, and developing information to support program management and policy-related decision-making, OBEMLA requested the Special Issues Analysis Center to carry out a summary and integration of Federally funded studies related to limited English proficient students which were conducted in the years 1980-1992. The purpose of this review is to summarize what has been learned through the research carried out; the product of this review will be recommendations for future research efforts that are based on the findings and conclusions.

As an introduction to the review of findings presented in this report, Section A of this chapter presents an overview of OBEMLA and background on the Title VII research agenda. Section B describes the goals of the literature review, the nature of the reports included in the review, and the review process. Section C provides a framework based on themes in educational research in general. This framework will both provide a more general context for the review of Federally funded studies, and will be used as a background against which to compare the findings of this review. Section D outlines the contents of the remaining chapters of the report.

A. OBEMLA and the Title VII Research Agenda

The Office of Bilingual Education and Minority Languages Affairs (OBEMLA) administers programs under Title VII of the Elementary and Secondary Education Act (ESEA), also referred to as the Bilingual Education Act. The Bilingual Education Act was first passed in 1968, and has been reauthorized four times since its initial implementation, with the fifth reauthorization currently being considered by Congress.

Title VII Programs

The Bilingual Education Act provides support for the development of services that will enhance equal educational opportunities for the language minority limited English proficient student population within the United States and its territories. Under Part A of the Act, financial assistance is provided to school districts and other educational agencies for developing and improving instructional programs for LEP students. At its inception, the Bilingual Education Act did not require use of the native language or culture in instruction; it provided support for training of teachers and materials development. In the reauthorization of 1978, the requirement that programs involve the use of the native language was added to the legislation. However, later, in the 1984 reauthorization, four to ten percent of funds were made available for programs that did not use the students' native language; in the 1988 reauthorization, this proportion was increased to 25 percent.

Part B addresses the need for collecting data on the population served and on the educational services provided to them, and for conducting evaluation and research related to services for LEP students. Part B includes the use of funds for State Education Agencies, Evaluation Assistance Centers, and research and development. In addition, the National Clearinghouse for Bilingual Education collects, analyzes, and disseminates information related to bilingual education. Funds distributed under Part C are used to train personnel for providing services to language minority limited English proficient students.

The Title VII Research Agenda

Section 742 of the 1978 reauthorization of the Bilingual Education Act incorporated language specifically requesting research related to a number of program areas. The section directed the (then) Office of Education to develop a national research program for bilingual education, coordinating the research activities with the National Instiute of Education (NIE), the Office of Bilingual Education (OBE; later, OBEMLA as restructured within the newly created Department of Education), the National Center for Educational Statistics (NCES), and other agencies as appropriate. Based on this requirement, the Education Division Coordinating Committee, which soon became known as the "Part C Committee", was created in the spring of 1978. The committee organized the requests for research identified in the legislation into three general categories: Category A included studies to assess the national needs for bilingual education; Category B included studies designed to improve the quality and effectiveness of services for students; and, Category C included studies designed to improve the program management and operations of Title VII, ESEA.

The Part C Committee was an interagency committee and, as noted in Meyer and Fienberg (1992), the competing interests were reflected in the nature of the studies carried out as control over the Part C research funds shifted over time. Meyer and Fienberg outlined the shift from NIE-funded basic research studies to evaluation studies funded under OPBE. For example, the Significant Bilingual Instructional

Features Study was carried out under NIE from 1979-1981 to identify instructional practices with language minority students and to investigate the linguistic, cognitive, and social processes involved. Examples of evaluation studies funded under OPBE were the National Longitudinal Evaluation of Services Provided to Language Minority Limited English Proficient Students and the Longitudinal Study of Immersion and Dual Language Programs for Language Minority Children, both of which were begun in 1983. The Part C committee was disbanded in 1984 by Secretary T. H. Bell; since then, the distribution of research funds has been negotiated between the Program and Evaluation Service (PES) and OBEMLA.

B. Overview of the Literature Review

This literature review was defined as based upon Federally funded studies related to LEP students that were carried out in the years 1980-1991. At the time the literature review was begun, many 1992 studies and some few 1993 reports were also available; the Government-furnished reports for the literature review (52 reports) therefore included 1992 and 1993 reports (14 of the 52 reports), and these were included in the review. The Special Issues Analysis Center obtained through other sources additional reports of Federally funded studies as were available and appropriate to the scope of the review. These were included in the interest of making the review as complete and comprehensive as possible. A total of 102 reports were reviewed.

The goals of the literature review as defined by OBEMLA were the following:

- Provide a listing of reports for the years 1980-present that present research findings relevant to limited English proficient students;
- Provide a summary, comparison, and analysis of findings, recommendations, and research methodologies;
- Integrate findings under four functional categories: student level findings, teacher level findings, instructional level findings, and administrative findings;
- Note in the review any findings that refer specifically to Asian/Pacific American (APA) populations; and,
- Provide a synthesis and integration of the findings, and recommendations developed out of the findings that may guide further research efforts and/or policy decisions.

Review Process

Each report was reviewed to obtain basic reference information and to summarize its contents. For this purpose, an extracting form was used to organize the report

findings in a way that would also guide the next steps in the literature review. On the extracting form for each study, the reviewer provided summary statements of the following:

- Research objectives;
- Research methodology;
- Main findings within the four categories of student, teacher, instructional, and administrative findings;
- Recommendations based on the findings of the report;
- Caveats or limitations in interpreting the findings; and,
- Findings specifically related to APA populations.

The extracting form was used as a guide for the analytic step of the review; it was also used as a basis for developing the report summaries provided in Appendix B of this report.

Intensive analysis of the reports was next carried out by reviewers who each took responsibility for one of the four main categories defined by OBEMLA: student, teacher, instructional, administrative. The reviewers then collaborated to examine linkages across the findings within the separate categories, and to discuss the overall findings of the review. Separate chapters were written to describe and summarize each of the four categories of findings.

OBEMLA's interest in a focus on research methodologies was addressed in three ways. First, the individual study summaries included description of the methodologies employed, and caveats/limitations as applicable. Second, as an overall examination of the methodology used in research on LEP students, a separate chapter was prepared that examined methodological patterns and issues in 17 selected major research studies carried out in 1980-1992. Third, an overview of the methodologies employed is presented in Appendix C through several summary tables based on the same 17 selected studies.

C. Structure of the Literature Review Report

In Chapter II, an overview two themes in educational research related to this review in general is presented as background, and as general framework to guide the development of recommendations for future research. Chapters III-VI present the findings of the literature review for student, teacher, instructional, and administrative categories. Each chapter concludes with a section on findings specific to Asian\Pacific American (APA) populations and an overall summary section. Chapter VII presents a discussion of methodological findings and issues. Chapter VIII provides a final summary and discussion of the findings, with recommendations for future research.

References and a listing by author of the 102 reports included in this review are provided in Appendix A. A study ID number is indicated in bold in any reference

for a report that was included in the review. Appendix B provides individual summaries of each report; the summaries are listed in chronological order by ID number. References to the reports in the chapters include the study ID number, for reference back to Appendix B. Using the ID number, the reader can refer to Appendix B for a description of study objectives, methodology, and a summary of findings for each study noted in the text. Appendix C provides an overview of methodologies.

II. A RESEARCH FRAMEWORK

The final task in this review was to summarize and integrate the findings and to define recommendations for future research studies. However, the Federally funded research is but one part of the available research related to instruction of limited English proficient students, and part of educational research in general.

Thus, any recommendations for future research should be informed not only by the findings of the more limited set of studies reviewed here but also by issues and findings that have been identified in other research. In this chapter we present a description of two research themes that are found in educational research carried out in approximately the same time period as the review reports. These research themes are related to perspectives on effective instruction and are based on theories of the learning process in general.

The two research themes are used in this review as a framework to be related to the findings of the review. The framework findings were expected to be viewed in comparison with the review findings in order to identify shared areas of emphasis or areas of consistency in findings, and to identify potential gaps in research relevant to limited English proficient students. Thus the framework is used as a guide in the review of findings to assist in the process of developing recommendations for future research.

A. Two Research Themes

In the context of this report, it is not possible to provide an in-depth review of literature. Therefore, the educational research context relevant to the same time period of the review is described simply, in terms of two broad themes that summarize shifts in perspective over this approximately ten-year period. The two themes identified for this framework are the following:

Passive to Active

In traditional views of learning, the learner is viewed as a passive recipient of information. For example, in the area of language learning, the use of drill and repetition to build up language "habits", reflected behaviorist origins of conceptualizations of a passive learning process. Similarly, in traditional instruction in academic areas such as math and science, students memorize and recite facts, but develop little understanding of underlying concepts (Goodlad, 1984; Mullis and Jenkins, 1988; Tharp and Gallimore, 1988; Warren and Rosebery, 1990). Instruction of this type emphasizes lower order thinking skills, as exemplified by drill and practice, and this type of instruction has been especially likely to occur in instruction of language minority students (Cole and Griffin, 1987). The underlying premise has been that basic skills must be mastered before a student can be challenged by more

demanding, higher order academic tasks (Secada, 1990). In passive instruction, the student is not challenged to develop higher order thinking skills. Passive instruction is linked to teacher-centered instruction, in which the teacher directs the student toward learning goals and provides the information to be learned.

In contrast, recent cognitive research on learning focuses on the active role of the learner. In this research effective learning processes are those that involve the learner in a self-directed process of inquiry (e.g., Warren et al., 1991, 39.3) which is guided and facilitated by the teacher. In taking a more active role in defining questions, examining explanations, researching solutions, active learners develop higher order thinking skills.

An active learning perspective such as this requires a substantial change in the roles and responsibilities of both the student and the teacher. The teacher is no longer responsible as a dispenser of information; instead, he/she becomes a facilitator of the students' learning. The students' roles change as well. They take on more initiative in learning activities and more responsibility for determining what questions are to be asked and what specific information is to be learned, although with the guidance of the teacher. In consequence, characteristics of instructional practices, of materials, and of classroom activities and teacher-student interactions become changed within the classroom. In addition, these changes in the classroom will have implications for changes within the school as a whole.

More recently, the term "authentic" instruction has been defined as instruction directed toward student achievement that is significant and meaningful (Newmann and Wehlage, 1993) and that is based on the assumption of the learner as an active participant in the learning process. Newmann and Wehlage (1993) define authentic instruction as satisfying three criteria: (1) students construct meaning and produce knowledge (as opposed to reproducing declarative knowledge and algorithms); (2) students use disciplined inquiry to construct meaning; and (3) students aim their work toward production of discourse, products, and performances that have value or meaning beyond success in school.

In language learning, a similar shift toward more active roles of students and more facilitative roles of teachers is observed. Research on acquisition processes has led to an awareness of the language learner's active structuring and restructuring of the language as he/she moves gradually toward proficiency (McLaughlin, 1987). This requires more natural, contextualized and meaningful interaction using the language as opposed to passive audiolingual drill and practice of decontextualized forms. Thus, communicative approaches to language learning focus on providing the learner with opportunities for meaningful exposure to the language being learned, i.e., language use in order to communicate ideas, to carry on substantive conversations about content, etc.

Decontextualized to Contextualized

The learning process is viewed as contextualized in three ways: (1) learning is a process that builds upon the knowledge, skills, and experiences that the learner already possesses; (2) learning is viewed as embedded within social interaction; and (3), learning in a classroom is understood not as an isolated event, but as an event that is shaped by the overall environment of the school.

New learning builds from existing knowledge. The experiences and understandings that the learner brings to a learning situation are the important basis for any new understanding or skill that to be developed. New knowledge must be linked with existing conceptual knowledge in order to become part of the learner's new knowledge base.

An example of the importance of existing knowledge in understanding new material can be seen in theory on the nature of reading. Research has shown that understanding of a text is built or "constructed" through the reader's coordination of information at several different levels (Anderson et al., 1985). While decoding of graphic symbols is one basic ability, decoding skills alone are not sufficient. A skilled and fluid reader utilizes higher order processes based on the use of syntactic cues, contextual cues, and the reader's "schema" knowledge or knowledge of the world (Anderson et al., 1983; Rumelhart, 1981; Rumelhart and Ortony, 1977).

The recognition of the role of the reader's existing knowledge is particularly salient for language minority students. The schema knowledge and knowledge of the world that language minority LEP students bring to the learning task are often different from those of non-minority students. The work of Moll et al. (1990) in bringing the "funds of knowledge" approach into classrooms and emphasizing linkages with the students' homes and communities builds upon this understanding. Thus, the context of learning in terms of the student's knowledge and experience is a critical component of the learning process.

Learning as embedded within social interaction. More recent conceptualizations of learning emphasize that it is a process that is embedded within social interaction. This interaction may be in the form of rich "instructional conversations (Lampert, 1988; Resnick, 1991) or through an apprenticeship relation with a person who possesses a skill. This emphasis is based upon Vygotsky's research describing "zone of proximal development" (1978) and the cognitive research of those such as Resnick (1991) who define the interaction of the student with others as a key component in building toward new knowledge or skills. In these conceptualizations, learning is student-centered, and the teacher provides coaching or "scaffolding" to assist the student in moving toward the next level (e.g., Resnick, 1989, 1991). The learning process may be carried out by students working cooperatively, both teaching and

learning from each other, and sharing the process of discovery as communities of learners (e.g., Brown and Campione, 1990). In this community the exchange of ideas, information and skills allows/requires each student to at times function as teacher and at other times function as learner.

Contexts specific to language use are also important. Research in linguistics and sociolingustics have demonstrated the importance of the context for understanding what is spoken or written, and for determining the appropriateness of particular forms and vocabulary within specific situations. For the language learner, understanding the culture (both cultural knowledge in terms of content as well as culture in terms of behavioral expectations, e.g., ways of refusing, etc.) as well as the linguistic forms are critical for fluent use of a language.

Learning as situated within contexts beyond classroom instruction. What happens in a classroom does not happen in isolation from the overall environment of the school, and "research on bilingual education needs to take into account the relatedness of program to institutional context" (Carter and Chatfield, 1986). The school context in terms of school climate and general level of expectations for students affects the interactions and performance of students within classrooms (Purkey and Smith, 1983). For language minority students, an important characteristic of the school is the degree of interaction of minority students with majority students in the overall student body (Garcia, 1988). An effective school environment for language minority students is also one in which there are generally positive perceptions of the language minority group on the part of teachers and students. However, programs for LEP students are often a segregated portion of the school with limited interaction with other, non-LEP students.

More recent research demonstrates the importance of an additional component, teachers and their interaction within a school. The research that has been reviewed suggests the definition of a "culture" for teachers that plays an important role in shaping the overall environment at a school and in shaping classroom instruction. Reform efforts that involve groups of teachers collaborating on new approaches to instruction, addressing instructional/school issues, reflecting on their instruction, and generally in supporting each other, create an environment that promotes more effective teaching and teacher satisfaction (Garcia, 1988; Lampert, 1991; Moll and Velez-Ibanez, 1990; Rivera and Zehler, 1990; Treuba, 1989). These types of teacher activities in turn affect classroom instruction and the overall climate of the school.

B. Summary

The two themes outlined above together define a beginning shift toward a new definition of the instructional process. Within the research described in this chapter, the instructional process changes teh roles and responsibilities of the teacher and student. In this description of instruction, a teacher facilitates learning by promoting the learner's process of inquiry, allowing the student to actively ask questions and develop answers with guidance when needed. It also involves the utilization of

resources and content that facilitate the student's learning by building upon resources of knowledge that he/she brings to the classroom. The instructional process also involves the teacher as an active participant through reflection and collaboration with other teachers, and also as a learner in activities with the students.

The implications for a description of effective practices are: (1) Description of classroom practice must be "active": i.e., it must focus on the process of teacher-student and student-student interaction. This focus should include description of the roles and responsibilities assumed by the teacher and by the students in the classroom learning activities. Do students have the opportunity to carry out a process of inquiry? Is there opportunity for directing their own learning? Does the teacher take on the role of facilitator with the students, and do students take responsibility for learning and carry out their roles as both teacher and learner at different points? Description of the learning activities should also include language use among the teacher and students. For example, what is the nature of language use? Are there opportunities for substantive discussion of ideas that will support development of higher order critical thinking skills?

(2) The description of instruction must be "contextualized". The description of practice must include a definition of the student characteristics, the student's background and knowledge, and the nature of the school community and home community. Also, the description of services themselves should be comprehensive, and include all contexts in which the student receives instruction, including instruction within the regular classroom. It is not sufficient to define in isolation the special instructional services received by LEP students; the impact of any special service will depend on the overall instructional experience received by a students. Therefore, unless all instruction received by a student is described, we do not know the full nature of the instructional services provided.

(3) The broader contexts of the overall school and the community must also be taken into account. The "culture" of the school overall, and specifically as related to LEP students will affect the nature of learning and instruction in the classroom and the beliefs and attitudes of both teacher and student. Research suggests that linkage of the community with the classroom and school can provide a critical component to instruction and offer students a valuable basis on which to build new learning. For this reason the context of instruction in terms of the community characteristics and use of community resources for instruction is an important component of instructional services.

III. STUDENT LEVEL FINDINGS

A. Overview of Studies

The first category of research identified by the Office of Education in 1979 was investigation of national need for bilingual education. This required an examination of the number of students enrolled in schools who were limited English proficient and therefore in need of special instructional services. In order to prepare for future needs, it was important to obtain not only estimates of current numbers of students but to also project how many LEP students would be enrolling in schools in the next several years. Thus, the first questions addressed by the "Part C Committee" within their research agenda were focused on obtaining estimates of the numbers of LEP students.

However, knowing the numbers of students alone is not sufficient to design appropriate services. In addition, information was needed on the demographic characteristics of the LEP students, including age/grade level, language, ethnic background and geographic distribution. To best structure instructional services, it was important to know the level of educational need of the LEP students and home background characteristics that might affect their ability to succeed.

The twenty-eight reports included in this review provide findings on students and their background characteristics. The earlier reports on LEP students were focused on answering the question of need. These studies provided estimates and projections of the number of LEP students. However, once these studies on numbers of students were completed, the later studies that were carried out provided estimates of LEP students within the context of research which was focused on other research questions related to instructional services. Also, later studies began to look more closely at the background characteristics of students and their parents. The most recent studies emphasize home and parent variables by examining parent involvement, parent beliefs and expectations, and parent attitudes or preferences regarding the instructional services received by their children.

B. Review of the Findings

The waves of immigrants entering the U.S. in the late 1970s and early 1980s escalated the need to know the size of the language minority, limited English proficient (LEP) population, especially the school-age population. Knowledge of the number of students in need of special language services is important for funding, staffing, and providing services, as well as for understanding the larger impact that such a population will have on society. The studies carried out in the early 1980s sought to fill this gap in knowledge by determining the size of the language minority and/or limited English proficient population.

Numbers of LEP Students

Several studies were carried out to obtain estimates or projections of the number of LEP students. Estimates of the number of LEP students have been developed on the basis of nationally representative samples; in other research, projections of the numbers of LEP students in future years have been developed on the basis of current population trends. In other cases, the numbers of students served by specific selected programs (i.e., not nationally representative samples) have been reported.

The numbers reported by the studies have not always been consistent. This variation has been due to differences in how limited English proficient is defined, and in the nature of the data used. Some of the earlier estimates were based on census data and other national databases that were available. Other reports provide data on numbers of students served by specific selected programs (i.e., not nationally representative samples). The estimates or projections have variously reported numbers of language minority limited English proficient (LEP), non-English language background (NELB), or ethnic minority persons. Thus, a great deal of variation arises in the numbers and the types of students identified.

Projections of the LEP population. Oxford and Oxford-Carpenter et al. provided estimates of the expected increases in LEP or non-English language background populations (Oxford, 1980, 12.1; Oxford-Carpenter et al., 1984, 12.2). NELB persons are those with a home or parent for which the usual language is a language other than English. Oxford and Oxford-Carpenter et al. developed projections that indicated that the number of non-English language background persons would steadily increase from 28 million in 1976 to 39.5 million in 2000. Projections for the Spanish NELB population indicated that this group would increase from 10.6 million (38 percent of total) in 1976 to 18.2 million (46 percent) in 2000 while the Asian NELB population would increase from 1.8 million to 2.3 million. The non-Spanish/non-Asian NELB population was projected to increase from 15.5 million to 19 million. The Spanish group accounted for two-thirds of the total growth of the total NELB population.

With regard to the limited English proficient (LEP) population, Oxford and Oxford-Carpenter et al. further projected that the Spanish, Asian, and non-Spanish/non-Asian LEP population would decline slightly during the 1980s and then rise strongly or return to the original levels by 2000. The Spanish LEP population would increase to 77 percent of the total LEP population in 2000 (from 71 percent in 1976), while the Asian and non-Spanish/non-Asian populations would remain at the same levels in 2000 as in 1976. Findings indicated that the highest LEP rates among NELB groups were among Spanish, Vietnamese, Navajo, and Yiddish language groups.

Estimates of numbers of LEP students. In the Descriptive Phase Report of the Longitudinal Evaluation of the Effectiveness of Services for LEP Students, a survey of K - 6 students in public schools conducted in Fall, 1983, Young et al. (1984, 21.1) estimated that there were approximately 882,000 language minority, limited English

proficient students, as defined by local district criteria. Over three-fourths of these students were native Spanish-speakers. For the same grade levels and including private schools, they estimated 970,000 language minority, limited English proficient students. For grade levels K-12, the language minority, limited English proficient population was estimated to be 1.355 million. Just over one-half of the language minority, limited English proficient students was male.

It is important to note that local definitions of LEP were employed in defining the LEP student population. Typically, more than one method was used by a school or district to determine whether a student should be classified as LEP. These included teacher/staff judgment, English oral proficiency tests, and/or English reading/writing tests. In fact, schools and districts in the study often reported different estimates of the LEP population in their jurisdiction. In these cases, both figures were weighted and district-level data were found to produce a more complete and accurate estimate.

Additional federally funded reports provided estimates with very limited explanation of the methodology employed in deriving the estimates. One such study is The District Summary for the Fall 1990 Elementary and Secondary School Civil Rights Survey (DBS Corporation, 1993, **59.1, 59.2**), which reported numbers of students in the U.S. who were in need of or enrolled in special services. The total number of students in need of services was reported as 1,532,960 students; 1,428,934 students were reported to be enrolled in special services. The study reported that of those in need of bilingual services, Native Americans accounted for 1 percent; Asians, 18 percent; Hispanics, 74 percent; blacks 2 percent; and whites, 6 percent.

Another study included in this review focused on one specific region of the U.S., the Pacific Islands. The study provided estimates of the limited English proficient population in this region, but supplied little information on the methodology used to produce the estimates (Freese and Woltag, 1984, **15.0**). (One source which appeared to have been used for supplying estimates was the State of Hawaii Department of Education). The study found that in Hawaii, about five percent of the approximately 200,000 students are learning English as a second language. In Guam, five percent of the 30,000 students (roughly 1,500) are learning English as a second language. In the Commonwealth of the Northern Mariana Islands, 87 percent of the 5,800 students are LEP (4,850 students). In American Samoa and the Federated States of Micronesia, 99 percent of the students speak English as a second language, and in the Marshall Islands and Belau, 99 percent of the students are LEP. Overall, almost all of the students in the Pacific Islands, with the exception of Hawaii and Guam, were reported to be learning English as a second language.

<u>Studies reviewing estimates and projections.</u> The estimates and projections provided in the federally funded studies previously described differ on the actual number of language minority, LEP, or NELB individuals that they report. Research outside of the reports provided for this review report similar differences. Pelavin Associates, Inc. (1985, **19.0**) examined the results of several studies that estimated the

numbers of school-aged children eligible for special language services. Based on the findings of the studies reviewed, they concluded that the LEP and non-English-language-background population, i.e., those eligible for special language services as defined by federal legislation, was 2.6 million for children ages 5 -14.

A number of explanations were suggested by Pelavin Associates to account for the differences between their estimate and estimates from other studies ranging from 1 million to 5 million. One possible source of differences suggested was that some studies report the number of LEP or the number of non-English-language-background students, but do not consider both. Differences among tests for determining LEP status were mentioned as additional sources of differences. Also important is the fact that the school-age population is normally between ages 5 -18; thus a study reporting estimates for students ages 5-14 would underestimate the entire population of potentially LEP/NELB students and those potentially eligible for special language services. Pelavin Associates, Inc. noted that most of the studies they examined used the Children's English and Services Study as the data base. This database includes data on ages 5-14 only and LEP students were defined through use of a specially designed language proficiency test with questionable cut-off scores and potential errors in items or culturally biased test items. Pelavin Associates concluded that estimates lower or higher than the 2.6 million figure predicted the number of LEP and NELB students who would benefit from special language services rather than estimating a potential base population of students already benefitting from special language services.

Current counts of LEP students are obtained through the Title VII State Education Agency (SEA) Annual Survey Reports. However, even with these as current counts, there is difficulty in obtaining data on the numbers of LEP students. An interim report of a study that analyzed data from the SEA Reports (Atlantic Resources Corporation, 1991, 45.0), a number of factors were identified that compromise the quality, comprehensiveness, and usefulness of data submitted in the Annual Reports to OBEMLA, and which occur even though the same reporting requirements apply to all grantees. Discrepancies included the lack of a standard definition of "limited English proficient", higher response rates from programs obligated to comply, and vague statutory requirements. Generally, data on LEP children, in public and private schools are less comprehensive and complete than data on all children in the school. In fact, the report notes that data are collected on a "superficial" level, that is checklists are the most commonly used means of determining LEP status and program titles only are used to describe the services offered to LEP students (Atlantic Resources Corporation, 1991, 45.0).

Macias and Spencer (1984, 11.0) carried out a comparative analysis of six national studies that estimated the numbers of language minority and LEP students in the U.S. The study found numerous discrepancies in the national estimates which ranged from less than 1 million to 5 million. Four variables were identified which accounted for the variety of estimates provided and which indicated that overall the same population was not described. These included different purposes/intentions

of the studies, different definitions of the populations, differences in methodology, and variations in data bases, surveys, etc. on which the estimations and projections were based. In addition, this review noted the problems presented with the use of secondary sources of data, upon which some of the studies were based, and described sampling errors.

Macias and Spencer thus concluded that estimates were actually provided on four distinct populations due to the differences and discrepancies which they highlighted in their review, primarily with defining the population. They noted that interpretations and use of the data often included mixing the four groups, when in fact more explicit references to the definitions used for identifying students would have cleared up any confusion and would have specified more clearly the targeted population.

In a review of four studies estimating the numbers of language minority and/or LEP students in the U.S., Ulibarri (1982, 7.0) found similar reasons for the various discrepancies in estimates of the number of LEP students. Ulibarri found that the discrepancies occurred primarily due to the overall intent and underlying purposes for the estimates, differing definitions of the target population, varying methodologies for estimating the target population, and variations in the underlying data bases. Definitions were found to include "need" based on the ability to benefit from services or language dominance. Based on an understanding of these four major reasons for such discrepancies, Ulibarri concluded that the estimates do not contradict one another if the estimates are provided within the context from which they were derived, and if, in the planning of services, the estimate used corresponds to those actually affected and not some other sub-population.

Locally defined cut-off scores, and changes in cut-off scores, of tests used for determining LEP status may also lead to differences in counts of LEP students, as Zehler pointed out in a review of the literature for The Descriptive Study of Services for LEP Students (1989, 43.0). Much variation existed among states, districts, and schools regarding the identification of LEP students. The complexity of the issue increases as measures used to determine LEP status may not remain consistent and given that a common definition of "LEP" is not applied. Likewise, Strang and Carlson, in a study on Chapter 1 services to LEPs, (1991, 40.0) noted that estimates of the number and characteristics of LEP students are imprecise because of the lack of uniformity in definitions between states and districts, and even within districts.

Geographic Distribution

The population of LEP students has not been evenly distributed and there have been areas of heavy concentration of LEP populations. Oxford and Oxford-Carpenter et al. (1980, 12.1; 1984, 12.2) reported that California, Texas, and New York were found to contain the heaviest concentrations of non-English-language-background populations (NELB) based on 1976 data. These states had 45 percent of the total

NELB population; in the year 2000, they were projected to contain 48 percent of the total NELB population.

In addition, the LEP population was more highly concentrated than the NELB population in these states. California, Texas, and New York also contained the largest numbers of Spanish LEP students. Nearly 80 percent of the total growth in the LEP population in 2000 was predicted to come from the Spanish-speaking LEPs in these states (Oxford, 1980, 12.1; Oxford-Carpenter et al., 1984, 12.2). High concentrations of NELB and LEP students in California, Texas, and New York demonstrate that language minority and LEP students are not evenly distributed throughout the U.S.

LEP and NELB students are also not evenly distributed throughout various types of communities. Across all regions, the majority of language minority and LEP students are located in urban areas (Puma, 1993, 58.2). Taken together with other characteristics unique to these geographic areas and specific communities, it is clear that services for LEP students should be developed and implemented with such contextual variables taken into consideration.

Ethnicity and language background

Students receiving special language services represent a variety of ethnic groups, and the language backgrounds of students enrolled in or eligible for special language services are diverse. In many cases, a number of languages or dialects are represented within one ethnic group, or across ethnic groups from geographically close regions.

Background characteristics were reported for students from a number of ethnic groups according to total student population, grade level, and place of birth. In a summary report of public and private schools and staffing in the U.S., the total student enrollment was reported as 45 million students (40 million of these students enrolled in public schools). These students represented the following ethnic groups: 72 percent white, 15 percent black; 9 percent Hispanic; 3 percent Asian; and 1 percent Native American (Choy et al., 1992, 54.0).

Ethnic group composition was reported by Bradby for eighth-grade Asian and Hispanic students (1992, 52.0). Nearly one-half of Asian eighth-graders are Chinese and Filipino. Southeast Asian and Korean groups each represent one-tenth of the population, followed by smaller percentages of Pacific Islanders, South Asians, and Japanese. Mexicans or Mexican-Americans comprise 62 percent of the Hispanic student population.

Young et al. (1984, 21.1), in the descriptive phase of the National Longitudinal Study, reported that over half (55 percent) of the language minority LEP first and third grade students, and especially the native Spanish-speakers, were born in the U.S.

With regard to the Native American LEP population, the majority (85 percent) of these students were born on, or near a reservation (i.e., in very remote locations), indicating that they have had greater levels of immersion in their native culture and language (Rudes, 198[illegible], **30.1**).

The Prospects Study, which looks at the short- and long-term effects of Chapter 1 participation in low poverty and high poverty schools, noted in the interim report the number of LEP students (by ethnicity per grade level) who were receiving compensatory education through Chapter 1 services. The data showed that of the students receiving Chapter 1 services over one-third of 1st grade Asian/Pacific Islander and one-third of Hispanic students were LEP; 25 percent of the 3rd grade Asian students and 44 percent of the Hispanic students were LEP; and, for the 7th graders, 13 percent of the Asians and 20 percent of the Hispanics were LEP. (Puma et al., 1993, 58.2).

Such ethnic diversity also implies a variety of language backgrounds, having major implications for the type(s) of special language services provided. The language backgrounds of minority language and/or limited English proficient students in first and third grade were reported by Young et al. (1984, **21.1**) in the nationally representative longitudinal descriptive study of LEP student characteristics and services offered to LEP students. In this study, students were classified based on local criteria for defining LEP and language minority status. Young et al. reported that Spanish was the native language of 78 percent of these students. Fourteen percent spoke Southeast Asian languages, including Korean, Vietnamese, Cantonese, Tagalog, and Cambodian. Overall, there were 84 language groups represented. Of schools with LEP students, 81 percent of the schools enrolled at least one Spanish-speaking LEP student. Approximately 20 percent of the schools had at least one Korean, one Vietnamese, or one Cantonese student (Young et al., 1984, **21.1**).

Freese and Woltag (1984, **15.0**), in examining bilingual education in the U.S. Pacific Islands, included demographic information on language background and numbers of LEP students throughout the various Islands. In Hawaii, LEP students come from over two dozen countries and speak 42 different languages, most often Ilokano, Samoan, Tagalog, Korean, Vietnamese, and Cantonese. In the Northern Mariana Islands, Chamorro and Carolinian are the first languages of the dominant population groups. Almost all of the people in American Samoa speak Samoan as their first language. Belauan is spoken by most residents of Belau. In the Marshall Islands, Marshallese is the language of instruction in the elementary school, with English the medium in high school. Sixteen languages are spoken throughout the Federated States of Micronesia. In Guam, most children speak English as a first language. Those speaking English as a second language have Chamorro as their first language.

Language proficiency

Many LEP students first enter school with very little or no proficiency in English; others may have a conversational level of proficiency in English but lack the level of skills required for academic use of English. In the studies reviewed, English language proficiency has been measured in a variety of ways, using informal or standardized measures. Most often, English language proficiency has been measured as oral language skills and/or as level of performance on reading subtests on standardized achievement tests. The types of services to be provided to LEP students must take these differences into account. Although a student's level of proficiency in his/her native language can provide an important basis for learning English, it is more difficult for schools and districts to assess level of native language proficiency, particularly for less common languages. Thus, there is much less known about native language skills of students.

Levels of language proficiency of bilingual, language minority, and/or limited English proficient students were reported in several of the federally funded studies provided for this review. Some of the studies highlight levels of proficiency for both the native language and English, while others focus on proficiency in one language only, most often English.

Findings regarding oral proficiency in English and the native language were reported for first and third grade language minority LEP students in the Year One Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students (Young et al., 1986, 21.2). Overall, most of the students had very limited/no oral proficiency, limited oral proficiency, or functional oral proficiency in English based on oral proficiency ratings using the Student Oral Proficiency Rating (SOPR). For example, 22% of grade 1 students had very limited or no oral proficiency, 26% had limited oral proficiency, and 26% had functional oral proficiency. Regarding grade 3 students, 10% had very limited or no oral proficiency, 16% had limited oral proficiency, and 33% had functional oral proficiency. Scores on standardized tests (i.e., SAT) were used as measures of reading skills.

In the same study, ratings of oral proficiency in the student's native language were also obtained with the SOPR. These ratings showed that 71 percent of the first graders and 78 percent of the third grade students were rated as fluent in oral proficiency in their native language. Likewise, approximately 29% of grade 1 students and 22% of grade 3 students were less than proficient in their native language.

The English and native language oral proficiency of Native American LEP students was also rated with the Student Oral Proficiency Rating (SOPR) in a study of Native American LEP students by Rudes et al. (1988, 30.1). Ratings indicate that first and third grade Native American LEP students scored higher on ratings of English

proficiency and lower on ratings of native language proficiency than their language minority LEP peers nationwide.

Using data from the National Educational Longitudinal Study (NELS) on factors contributing to the academic and social development of Asian and Hispanic eighth-graders, Bradby reported that approximately 65 percent of both Asians and Hispanics, in self-reported responses on ability to communicate with others, indicated high levels of English proficiency, while less than one-third noted moderate levels of proficiency in English. Four percent reported a low level of proficiency in English. With regard to language skills, many Hispanic and Asian eighth-grade students were found to report similar proficiency levels (Bradby, 1992, 52.0).

Regarding language proficiency levels by age group, O'Malley reports on the English language proficiency of LEP children ages 5 - 14 (O'Malley, 1982, 6.0). Although reports are for a limited age group of LEP students, schools surveyed in the study reported that 22 percent of the students were able to use English very well, 19 percent used English adequately, and 14 percent were slightly limited in their ability to use English. Thirty-four percent of the LEP children were not rated at all on their English ability.

The Young et al. study was the only study which reported length of time in the U.S. and oral proficiency in both English and the native language. Spanish-speakers were rated as having a higher level of oral proficiency than the Chinese speakers, which was attributed to a longer length of time in the U.S. Very low ratings were achieved in oral proficiency for both students who had been in the U.S. for one year or less and for students who had been in the U.S. for more than five years, differences were attributed to two factors. Newly arrived students may immerse themselves in English, thus receiving poor ratings in English as they are in developmental stages. However, for students who have been in the U.S. a longer period of time, increased proficiency in English may not occur if they are not exposed to correct English, e.g. if there are no fluent English speakers in the home community (Young et al., 1986, 21.2). Generally, the longer the length of time in the U.S., the higher the level of English proficiency and the lower the level of native language proficiency.

Socioeconomic status

The socioeconomic level of a student is a background factor that has in general been related to parent and student participation in school and overall educational attainment. In the studies reviewed, this same relationship between socioeconomic status and achievement was found, and in some cases, socioeconomic status was suggested as a more critical factor in determining students' level of achievement than was lack of proficiency in English. However, different definitions of socioeconomic status have been employed across the various studies. In Young et al. (1986, 21.2; 1984, 21.1), level of socioeconomic status was determined based on eligibility for free or reduced lunches. Another study (Rosenthal et al., 1981, 3.0) defined socioeconomic

status as related to level of education of parents, family income, parents' occupation, and race.

Rosenthal et al. (1981, 3.0) conducted a study with a nationally representative sample of 15,000 students, with just over 10% from non-English language backgrounds. In this study, they investigated the extent to which socioeconomic status and language background affect achievement. Home language background was not found to be an important factor in explaining student achievement; findings indicated that socioeconomic status differences rather than home language background had a greater affect on achievement. Nonetheless, they pointed out that language proficiency must be examined in addition to language background.

The same finding regarding socioeconomic background and achievement was presented by Birman and Ginsburg (1981, 5.0) based on a review of six studies (including the Rosenthal et al. study, 1981, 3.0). The findings of their review indicated that while students from non-English speaking homes may have educational needs, these may be poverty-based rather than derived from a dependence on a non-English language.

Findings of the descriptive phase of the National Longitudinal Study showed that in 1983-84 nearly all (91 percent) language minority LEP students in grades K-6 were from low income families, i.e., received free or reduced lunches. Only about half of all other students received such assistance (Young et al., 1984, 21.1). However, Young et al. point out that socioeconomic status may not be such a relevant variable for recently arrived students, since parent educational level and former socioeconomic status may not be reflected in their current level of income.

The overall socioeconomic status of the school is also related to concentrations of LEP students. In the interim report of the Prospects study on Chapter 1 participation (Puma et al., 1993, 58.2), the poorest schools were reported to have about three times the national average of LEP students in first and third grade receiving compensatory education, and the number of LEP students in the wealthiest schools is considerably lower than the national average (Puma et al., 1993, 58.2).

Information on socioeconomic levels of non-English language background students was collected in the Year 1 Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students by Young et al. (1986, 21.2). Results showed that Spanish language students came from the lowest socioeconomic status families, the Chinese language students were in the middle range, and other language groups came from families of the highest socioeconomic status.

These federally funded studies have used socioeconomic status as a variable in studies on LEP students. If socioeconomic status is to be used as a variable, perhaps it should be consistently defined in order to compare and contrast study findings. What the findings of these studies also imply is that services must match the needs

of students. If needs are based on socioeconomic levels as well as language background, the type of service offered should reflect this. In addition, the high proportion of LEP students from low income backgrounds may also reflect needs for non-instructional support services. Thus far, the types of non-instructional supports provided by programs have not been a focus in defining the characteristics of services received by LEP students.

Home/Parental Background

The support that students receive in their home environment plays an essential role in the degree to which students achieve academically. School personnel advocate the important role of parental support and interest and involvement in the education of their children, and it is generally found that an active parent component in a school system greatly enhances the overall school community. However, parent involvement can be defined in a number of ways; it may mean parent attitudes of support for education and interest in their children's school work. It may mean active assistance of children at home with school work, or it may refer to parents actually assisting within the school building in some way or attending parent-focused activities provided by the school. The effects of parent involvement are likely to vary depending on the way in which involvement is defined. Also, given cultural differences in how schools and educators, and the role of parents are viewed, it is likely that families from different cultural backgrounds will vary in their assumptions about their own role.

Several of the studies included in this review have provided data related to parents and their involvement, defining this in different ways. For the most part, there has not been a considerable emphasis on the role of parents, particularly in the studies carried out in the early 1980's. Some greater concern with the role of parents and their beliefs and attitudes is evident in more recent studies, including a study focused specifically on the Title VII Family English Literacy Program which has as its goal the provision of services to parents of LEP students. Given recent trends toward increased linkages between home, school, and classroom, gaining further information about parents and home background of students is an important step to take. Below, the findings of this review are presented with regard to home environment, parent education, parent support for education, parental preferences/attitudes regarding the nature of the services to be provided, and parent involvement in instruction.
The background of parents of LEP students and the degree to which parents are involved in the education of their children varied by ethnic/linguistic group.

Home environment. A first question to ask regarding home environment is: Who is present in the home? If the school is going to reach out to include parents or guardians of students, it is important for them to know who it is they are trying to reach and what constraints (e.g., in terms of being a single caregiver, language, etc.) might make it difficult for the parents/guardians to become involved. For example, data collected in Year One of the National Longitudinal Study (Young et al. 1984, 21.2) showed that almost one-fourth (21-22 percent) of grade 1 and 3 LEP students

came from homes missing either a male or female guardian. Spanish language students were found to be more likely than others to live in homes without a male guardian. Burkheimer et al. (1984, 34.2) found that the first and third grade LEP students included in their cohort samples had an average of two adults and 2.2 siblings.

Parent level of education. The parents' own level of education will affect parental values regarding education and also affect their participation in their children's education. Preliminary data from the Prospects study indicated that students' language minority and LEP status were closely related to the mother's level of education. Fifty-five percent of third grade students who were designated as language minority or LEP and who were receiving Chapter 1 came from families in which the mother had no more than 8 years of schooling (Puma, 1993, 58.2). Findings of the Prospects study generally indicate that the lower the level of parental education, the lower will be student achievement (Puma et al., 1993, 58.2). In an earlier study, Young et al. (1986, 21.2) found that fathers completed more years of schooling than mothers for both Spanish and Chinese-speaking students, but especially for students with native languages other than Spanish. Compared to parents of other language minority LEP students, Native American parents reported attending school an average of three years more than others (Rudes et al., 1988, 30.1).

Parental expectations. The educational expectations parents held for their children were found to vary by ethnic group. Data from the National Longitudinal Study (Year One) showed that parents of Spanish language children had the lowest expectations. Chinese parents had a mix of both very high and very low expectations, and parents of other language groups had medium to high educational achievement expectations (Young et al., 1986, 21.2). Rudes et al. (1988, 30.1) reported that over one-third of the Native American parents expected their children to attend college but only 10 percent expected the students to continue in a professional or graduate program. These expectations are slightly lower than those of language minority LEP students from other language backgrounds (Rudes, 1988, 30.1).

Parental preferences for services. In a study focused on the cost and delivery of bilingual services, parental attitudes toward bilingual education programs were investigated (Carpenter-Huffman and Samulon, 1981, 2.0). Overall, parents supported the learning of English for their children although differences existed based on ethnicity. For example, Chinese parents, in contrast to Hispanic parents, preferred to send their children to private programs for native language and culture instruction, rather than hold the school responsible for such instruction. Vietnamese parents supported immersion programs for their newly arrived children, although they anticipated holding the school responsible for native language and culture instruction after about five years of residence in the U.S.

Parental preferences were also examined in another study, carried out by Baratz-Snowden et al. (1988, 31.0). This study was focused on the views of language minority parents nationally regarding the schooling of their children. A sample of

Asian, Puerto Rican, Mexican American, and Cuban parents were derived from the National Assessment of Educational Progress (NAEP) study as well as through a supplemental telephone survey. In general, the study found that Asian parents as compared to Puerto Rican and Mexican American parents were more likely to be in favor of an all-English program, such as an immersion program, and less likely to support the use of the home language for instruction. Asian parents were also less likely to hold the school responsible for teaching their children literacy skills in the non-English language. Thus the findings suggest considerable differences by ethnic/linguistic group in parents preferences regarding services. The generalizability of the findings is restricted, however, given problems in the structure of the two samples on which the study was based.

Parent involvement in instruction. Parents' involvement in their children's education can take many different forms, and this diversity is seen in the findings reported in the federally-funded studies. Involvement can perhaps first of all begin with how the parent shows interest in the child's schooling at home, by asking questions and by supporting the child's efforts in doing homework. Analysis of the Year One data from the National Longitudinal Study showed that 80 percent of parents of Spanish-speaking students reporting talking with their child almost every day about school issues compared to 57 percent for parents of Chinese students and 74 percent of other parents. These differences were consistent at both grade 1 and grade 3. However, parental support for education might also be reflected in the hours that a child spends on homework or reading or being read to, on the assumption that parents may require more time in these activities. The data from the National Longitudinal Study show that Chinese students spend an average of 6.6 hours on homework and 3.3 hours reading compared to 4.5 hours on homework and 1.5 hours of reading reported for Spanish-speaking students. Thus, across these two groups, parent support for education may take different forms

Another way to view parent involvement is in terms of more direct involvement in the program at the school building. Carpenter-Huffman and Samulon (1981, 2.0) investigated the extent of parent involvement and decision-making in bilingual programs in case study site-visits conducted at six LEAs in the West and Southwest (The focus of the study, however, was to estimate the delivery and cost of bilingual programs). The findings indicated that even though formal mechanisms for parent involvement such as school liaisons and advisory committees existed at the programs, few parents of children in the bilingual programs were involved in the schooling of their children. Program staff noted a number of reasons for the lack of participation, among them cultural differences in the parental role in education, fear of being identified as undocumented immigrants, lack of time due to work commitments, and fear of organizations affiliated with the government, such as the school.

Parent involvement has been demonstrated to be an important component of programs identified as exemplary. For example, in the Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs (SAIP), Tikunoff et al. (1991; 46.3) found that parental and community involvement were key

elements of programs. Common approaches to promoting parent involvement included the availability of a translator/interpreter in the native language who facilitated home-school communication, translations of report cards and school notices/information, adult ESL classes, and involving parents in the parent-advisory committee (Tikunoff et al., 1991, 46.1-3).

A study that described migrant education programs identified as effective practices those involving parents on advisory committees and in fundraising activities, and providing training and workshops in (among other things) parenting skills. Since migrant education programs generally include about 40 percent LEP students, these findings are also relevant to parents of LEP students. The authors recommended increasing these types of activities in order to increase parental involvement in schooling (Rudes and Willette, 1989, 35.1).

Another example of an effective parent involvement activity/program is the Title VII-funded Family English Literacy program. Family English Literacy (FEL) programs have been supported to increase parental involvement in education. In a descriptive study of the Title VII Family English Literacy Programs funded from 1985-1989 (Atlantic Resources Corporation, 1992, 50.0), findings indicated that participants enrolled in FEL programs to learn or improve their English; benefits from enrollment in the program included the development of English literacy skills and involvement in the education of their children. Mothers were the major group served by the programs. Features of the projects which most contributed to participant growth and progress included bilingual staff; intergenerational focus; opportunity for families to work together; accessibility to project instruction, child care, and/or transportation; and the importance of helping parents realize the significance of their role in their children's education. Project directors considered the parents' involvement in their education; their improved English, literacy, and parenting skills; and their increased self-esteem and confidence as important project achievements.

C. Findings Specific to Asian/Pacific American Students

Few of the federally funded studies included in this report focused on the Asian/Pacific American (APA) student population. The one study (Freese and Woltag, 1984, 15.0) focusing specifically on this population looked only at the situation in the U.S. Pacific Islands, which contain characteristics unique from the continental U.S. Other studies, if describing the APA population within the study sample or in reporting findings on this population, frequently linked various Asian ethnic and language groups together within one group, "Asians."

High concentrations of language minority, limited English proficient students are found throughout the U.S. Pacific Islands; in some areas up to 99 percent of the student population speaks English as a second language (Freese and Woltag, 1984, 15.0). Oxford and Oxford-Carpenter et al. (1980, 12.1; 1984, 12.2) reported that in the year 2000, the Asian NELB population is expected to increase from 1.8 million to 2.3

million. Although a number of language groups are represented among the Asian population, the highest LEP rate was reported among the Vietnamese language group

In 1983, fourteen percent of first and third grade minority language and/or limited English proficient students spoke Southeast Asian languages, including Korean, Vietnamese, Cantonese, Tagalog, and Cambodian; and at least twenty percent of the schools had at least one Korean, one Vietnamese, and one Cantonese student (Young et al., 1984, 21.1). Bradby reported that nearly one-half of Asian eighth-graders are Chinese and Filipino. Southeast Asian and Korean groups each represent one-tenth of the population, followed by smaller percentages of Pacific Islanders, South Asians, and Japanese. Nearly three-quarters of Asian (and Hispanic) eighth graders reported high or moderate levels of English proficiency (Bradby, 1992, 52.0). Bradby appeared to be the only study including grade levels beyond the elementary levels.

Asian populations are found to differ on certain behaviors/attitudes from Hispanic populations. For example, Asian parents are less likely than Hispanic parents to hold the school responsible for teaching their children to speak, read, and write their non-English language; they are less enthusiastic than Hispanics toward the use of the non-English language for instruction, and more likely to support English immersion programs (Baratz-Snowden et al., 1988, 31.0).

Baratz-Snowden et al. (1988, 31.0) also reported that Chinese parents preferred to send their children to private programs for native language and culture instruction and held fewer school-related conversations than Spanish language parents. In addition, Young et al. (1986, 21.2) reported that Chinese parents included those with very high expectations and those with very low educational achievement expectations of their children. Young et al. (1986, 21.2) also reported that Chinese language students were usually in the middle status families. Vietnamese parents supported immersion programs for newly arrived children but results indicated that after about five years of residence in the U.S., they may want the school to be responsible for maintaining the child's native language and culture (Baratz-Snowden, 1988, 31.0).

D. Summary

There is considerable diversity within the LEP student population, especially with respect to language, culture, English proficiency, educational experience, learning skills, and home background. Many language groups, especially Spanish and Asian languages, are represented within the non-English language background, language minority, and limited English proficient populations throughout the U.S. and the U.S. Pacific Islands. In the descriptive phase of the National Longitudinal Study, 84 different language backgrounds were identified for LEP students.

Regionally, most LEPs are found in the West, followed by the Northeastern, Southern, and Midwestern states. Although studies have focused primarily on the Hispanic population, a few of them investigated the Asian/Pacific American population.

The estimates of numbers of limited English proficient and NELB students have varied due to factors such as the use of different definitions of the population, the use of different means of identifying limited English proficient students, and different databases. Such differences underline the complexity involved in attempts to identify and pinpoint exactly who should be eligible for special language-related services.

Ethnicity played a major role in the differences noted regarding the home environment and parental background. Parental background and involvement in instruction clearly differed by ethnic group, and even within ethnic groups. Overall, parents of Spanish-speaking students prefer the use of the native language in instruction, expect the school to teach their children English, have lower levels of education than other language minority groups, hold more school-related conversations with their children, and have the lowest academic expectations of their children, compared to parents of Asian, Native American, and other language groups. Chinese and Vietnamese parents, as compared to parents of Spanish-speaking and other language students, hold fewer school-related conversations with their children. However, Asian language background children were reported to work longer on their homework and read more on the average. Chinese and Vietnamese parents prefer immersion programs rather than maintenance or transitional programs. They consider learning English as one of the top three important objectives of schooling. Native American parents hold fewer school-related conversations compared to all other language minority and limited English proficient groups. They are more highly educated than other language minority and LEP parents, and a greater percentage of them expect their children to complete college.

The research funded by the Federal government has focused on a range of characteristics specifically tied to students. As this chapter reveals, these areas include the estimates and projections of the number of students receiving or in need of special language-related services, demographic characteristics, and parental and home characteristics. However, a variety of questions remain that either were not addressed in the studies supplied for this literature review, that were not investigated, or that should be revisited.

Based on the objectives, methodologies, and findings reported, three general areas stand out as prime categories for further investigation. First, few distinctions are noted regarding the demographic differences between elementary and secondary level LEP students, which could influence school staffing, administration, and instructional programs. Second, the native culture of students plays an increasingly important role in the provision of special services for LEP students. Cultural differences may affect communication patterns and social interaction, especially with regard to gender differences. Third, further investigation of parents' beliefs about what their role should be in the school and in their chilren's education. For example, Cardenas and Rudes (1983, 10.1) noted that efforts to increase parental/community involvement were less successful when parents and community feel that education is the school's responsibility. Differences in beliefs related to parent/community roles and responsibilities most likely exist by cultural group. If these differences can

be better understood the communication between home and school can be made more effective and ways to encourage parents to become involved can be designed to take these differences into account. Related to an examination of beliefs about their role as parents should be investigation of why parents do not get involved in activities: there may be very practical reasons such as lack of transportation, hesitation in bringing younger children with them to the school, etc. These types of barriers may exist and, once known, could be directly addressed.

Other areas for further examination include, but are not limited to: LEP students with other special needs, such as refugees, handicapped, developmentally disabled; and further definition of LEP students' educational background in their native country (or, for migrant students, previous education in the U.S.).

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IV. TEACHER LEVEL FINDINGS

A. Overview

Much of the emphasis in recent reform efforts and school restructuring has been on the role of the teacher. Teachers are being given new opportunities for working together as professionals, for making joint decisions within school-based teams, and for setting up newer forms of learning activities in the classroom. The role of the teacher is an important one, and the teacher's experience, training, and other background characteristics affect the way instruction is presented to students. The 25 federally funded reports reviewed in this chapter present findings on teachers of LEP students. The findings include data on teacher background characteristics, including education, language proficiency, and teaching experience. Findings are also presented related to certification/endorsement, training, and teachers' attitudes as they relate to classroom practice and decision making.

Teachers are a very critical component of the resources available nationwide to address the needs of LEP students. For this reason, one important question to be asked is whether the supply of teachers who are trained to work with LEP students is sufficient. Other questions concern their level of training and, once trained, what percentage of those who are trained actually move into positions where they work with LEP students. Only two of the reports included in this review were focused specifically on examining nationally representative data related to numbers and characteristics of teachers; only one of these reports focused on the data on teachers of LEP students only. Other reports that have been carried out since 1980 have obtained data on teachers as one component of several being examined.

B. Review of Findings

In 1985, in a review of studies funded by the U.S. Department of Education, Pelavin Associates (1985, 19.0) included an examination of the data available that assessed the level of supply and demand for teachers of LEP students. They found that this was difficult to do. As they pointed out, there are discrepancies in estimates of the number of the LEP student population on which to base a statement of need. In addition, they found that there was not agreement on what constitutes a qualified bilingual teacher, since definitions of criteria vary by language and region.

A national database on all teachers (not only ESL/bilingual teachers) was developed in 1987-1988 in the Schools and Staffing Survey (SASS). The SASS, an integrated set of surveys conducted by NCES, profiled the U.S. teaching force and presented information on policies and practices. Administrators and teachers from 9,300 public schools and 3,500 private schools were included in the study. The Teacher Follow-up Survey (1988-1989) was administered to a subsample of the SASS teacher survey respondents. The Schools and Staffing Survey identified teachers as bilingual or ESL teachers if they used a native language other than English to instruct LEP students or

if they provided intensive instruction in English to students with limited English proficiency (Choy et al., 1992, **54.0**).

Both of the reports in this review that focused on teachers exclusively used the 1987-88 Schools and Staffing Survey (SASS) data. Choy et al. (1992, **54.0**), primarily summarized and interpreted the SASS results in general; Pelavin Associates (1991, **44.0**) focused on bilingual and ESL teachers.

Other reports in this review provided data on teachers of LEP students as part of larger reports or studies. The Young et al. 1984 (**21.1**) study was one example of such a report. This study provided nationally representative data on teachers of LEP students as part of a National Descriptive Study of Services for LEP Students. Teachers of LEP students included all teachers who taught at least one LEP student in their classes; thus, it was not limited to teachers who taught primarily in areas of special services for LEP students. In that study, all academic content-area teachers offering special services to language minority LEP students in grades K-6 in the 1983-84 school year numbered an estimated 44,296. In addition, 4,083 special education teachers and almost 5,000 resource or instructional support staff were estimated to provide services for these students. Of teachers providing content-area instruction to LEP students, 28 percent held credentials or certificates in bilingual education while 6 percent held them in ESL (Young et al., 1984, **21.1**).

However, it should be noted that the data available on teachers of limited English proficient students do not always refer to the same populations of teachers. For example, some studies have focused on teachers certified as bilingual and ESL teachers; other studies have provided data on teachers within Title VII projects or specific programs. Young et al. (1984, **21.1**) identified as teachers of LEP students all teachers who instructed LEP students in their classes, including all academic teachers.

Demographic Characteristics

Based on data from the Schools and Staffing Survey (1987-88) and the Teacher Follow-up Survey (1988-89), Choy et al. (1992, **54.0**) found diversity in the demographic composition of the school teaching force. The demographic characteristics apparently varied by community type, school sector, and school level. Specific demographic findings are reviewed below.

Gender. In summarizing the results of the Schools and Staffing Survey (1987-88) and the Teacher Follow-up Survey (1988-89), Choy et al. (1992, **54.0**) noted that in the 1987-88 school year, 71 percent of all teachers in public and private elementary and secondary schools were female while only 29 percent were male. Pelavin Associates (1991, **44.0**), in their analyses of the SASS data on bilingual education and ESL teachers, found that the gender ratio with respect to bilingual education was even greater than that of regular teachers, at a ratio of more than 6 to 1 females to males.

Race/Ethnicity. Choy et al. (1992, 54.0) reported that, in 1987-88, 50 percent of the public and private elementary and secondary schools had no minority teachers on staff, while 14 percent of the schools had teaching staff comprised of at least 30 percent minority. Of all teachers in public and private elementary and secondary schools, 12 percent belonged to a minority group (7 percent black, 3 percent Hispanic, 1 percent Native American, and 1 percent Asian).

In a separate analysis of the 1987-88 (SASS) data, Pelavin Associates (1991, 44.0) compared the ethnic background of bilingual education teachers and ESL teachers. They reported that while Hispanic teachers represent 59 percent of the bilingual education teachers, they comprise only 26 percent of those teaching ESL. In contrast, about 31 percent of the bilingual education teachers and 62 percent of the ESL teachers were white.

Pelavin Associates also reported that for Asian/Pacific American teachers it was found that about three to four times as many teach bilingual education and ESL classes as teach in the regular classroom. For Native American teachers, findings show that about the same proportion teach bilingual education and ESL as teach in regular classrooms.

Age. According to Choy et al. (1992, 54.0), in 1987-88, the average teacher age overall was 40. Pelavin Associates (1991, 44.0) reported a similar average for bilingual and ESL teachers. They reported that between 37 percent and 42 percent of bilingual education and ESL teachers are between the ages of 35 and 44. However, twenty-five percent of bilingual education teachers, 44 percent of ESL teachers, and 34 percent of regular teachers are between 45 and 64 years old. A higher proportion of bilingual education teachers (31 percent) is between 25 and 34 than either ESL (19 percent) or regular teachers (22 percent).

Language Background and Proficiency

Although the language background of teachers of LEP students varied widely, more often than not the teacher could speak the language of the student. Young et al., (1984, 21.1) found that fifty percent of content-area teachers of language minority, LEP students spoke their students' native language, usually Spanish. In the longitudinal phase of the same study, Young et al. (1986, 21.2) found that the main teachers of language minority LEP students generally were proficient in English, that 70% had a background in both English and in the student's native language while about 25% had a background in English but not in the student's native language. Teachers of Spanish-speaking or Chinese-speaking students were most likely to be bilingual in both English and the students' native language; teachers of students from language groups other than Spanish and Chinese were most likely to be monolingual in English. (The sample of students in this study was representative of large districts nationally, i.e., those with 200 or more LEP students in grades 1 and 3).

Other Federally funded studies included in this review presented data on the language backgrounds and proficiency levels of teachers who instructed LEP students within particular programs. In some of the exemplary Special Alternative Instructional Programs (SAIP) projects discussed by Tikunoff et al. (1991, 46.2), teachers used English for instruction 90 percent of the observed class time. However, they were proficient enough to use the LEP students' native language to support English language and concept development.

With respect to teachers in the structured English immersion, early- and late-exit transitional bilingual education programs studies examined by Ramirez et al. (1991, 38.1), there were differences in teacher language proficiency across the different types of programs. The late-exit teachers tended to have backgrounds similar to those of their students, and they were sufficiently fluent in Spanish to teach in it. Teachers in the immersion strategy and early-exit programs, on the other hand, usually were not Hispanic nor were they proficient in Spanish.

Cardenas et al. (1983, 10.2) reported that 66 percent of teachers within Title VII-funded basic projects operating during the 1980-1981 school year were proficient in a language other than English. Although most teachers were proficient in one other language (usually Spanish), 10 percent reported proficiency in at least two other languages. Proficiency in another language varied by project size, with more teachers in larger projects reporting proficiency in a second language than those in smaller projects. Also, more teachers were proficient in another language in projects serving Spanish-speaking students.

In contrast, Rudes et al. (1988, 30.1) found that the main teachers in classrooms with Native American language minority LEP students had a strong background in English but not in the Native American language. However, the auxiliary and support teachers had a lower proficiency in English and a stronger background (though still low) in the Native American language. Freese and Woltag (1984, 15.0) reported that teachers in the Pacific Islands have varying degrees of English proficiency, and the vernacular is used for instruction through grade 5. The Pacific Islands are linguistically diverse, and in most islands English is a second language, used primarily for academic purposes.

Educational Background

Choy et al. (1992, 54.0) reported that of all the public and private elementary and secondary school teachers surveyed in 1987-1988, 99 percent had a bachelor's degree and almost one-half (46 percent) had a higher degree. Pelavin Associates (1991, 44.0) contrasted the education (highest degree attained) of bilingual and ESL teachers. Fifty-eight percent of bilingual education teachers had completed up to a bachelor's degree and an additional 37 percent held a master's degree or beyond. These data therefore indicate that about 95 percent of bilingual education teachers had a bachelor's degree, compared with 99 precent of teachers overall (as reported by Choy). For the ESL

teachers, Pelavin Associates reported that 39 percent held only a bachelor's degree and 57 percent held a master's degree or beyond, i.e., a total of 96 percent held a bachelor's degree. From these data, it appears that a higher proportion of ESL teachers have a postgraduate degree compared to bilingual education teachers, and that a slightly lower proportion of ESL and bilingual education teachers, as compared to regular classroom teachers, hold bachelor's degrees.

Young et al. (1984, **21.1**), in data from all teachers with at least one LEP student in their classes, found that ninety-eight percent of the teachers of language minority LEP students had a bachelor's degree while 37 percent also had a master's degree. In an evaluation of Title VII services to Native American students with limited English proficiency, Rudes et al. (1988, **30.1**) found that over 90 percent of the teachers had a bachelor's degree while 29 percent had a master's degree. Cardenas et al. (1983, **10.2**) reported that all teachers in the Title VII-funded bilingual education programs had college degrees and that a little more than 25 percent held a higher degree, usually at the master's level.

Teaching Experience

Teacher experience, both general and specialized, may be related to the effectiveness of instruction. In reporting on the analyses of the 1987-88 Schools and Staffing Survey (SASS) data, Pelavin Associates (1991, **44.0**) contrasted the years of experience of bilingual and ESL teachers with that of regular teachers in all other subject areas. In general, regular teachers had more experience than bilingual education and ESL teachers. Thirty-five percent of bilingual education and 25 percent of ESL teachers had taught for fewer than six years, compared with 19 percent of regular teachers. Choy et al. (1992, **54.0**) reported that the average years of teaching experience for teachers for all public and private school teachers is 14.2 years.

Young et al. (1984, **21.1**) reported that the classroom experience of teachers of LEP students varied widely. Teachers of language minority LEP students had a median of 10.7 total years of teaching experience in grades K-6 and 5.8 years of experience teaching LEP students. Rudes et al. (1988, **30.1**) found that teachers who were instructing grade 1 Native American students had a mean of 12.2 years of teaching experience overall and 8.1 years of experience in teaching LEP students. Grade 3 teachers had a mean of 9.5 years of experience overall and 6.6 years of experience in teaching LEP students.

Cardenas et al. (1983, **10.2**), found that over one-half (58) percent of both classroom and resource teachers associated with Title VII projects reported having taught in a mono-lingual English-speaking classroom. A slightly higher percent (42 percent) of the resource teachers had previously taught in bilingual classrooms compared with classroom teachers (31 percent). However, years of teaching experience were similar for both groups. Thirty-one percent of classroom teachers and 32 percent of resource teachers had more than 12 years of teaching experience while 21 percent of the

classroom teachers and 27 percent of the resource teachers had fewer than four years of experience.

Although findings on years of teaching experience were reported in a variety of ways and on a variety of populations, all seem to agree that regular classroom teachers are likely to have more teaching experience than their specialized counterparts in bilingual education and ESL classrooms. This is likely to be at least in part due to the differences in ages presented earlier, showing that a higher proportion of bilingual education teachers are in the youngest age range in the study (age 25-34).

Certification

Any discussion of certification findings must begin with the understanding that there is not any consistent certification standard. Certification may include regular, probationary, and temporary certification, and there is wide variation across states in the conditions for issuing various certifications (Choy et al., 1992, 54.0). Young et al. (1984, 21.1) reported that 25 percent of districts contacted did not require district or state bilingual education certification. Most (84 percent) of the remaining districts did have certification requirements, but these requirements often included waivers and provisional certification. Among the districts requiring bilingual education certification, the median district had 12 percent of its teachers under waiver. Although wide variation still exists, findings of the Descriptive Analysis of Title VII-Funded State Education Agency Activities (Nava et al., 1984, 14.0) showed that the States were moving toward institutionalization of certification requirements for LEP teachers. Of nine states reviewed in the case studies selected, seven already had legislation and one had legislation under development for certification of teachers in bilingual education or ESL.

The number of teachers who are certified in bilingual education or ESL does not necessarily imply the same number are teachers of LEP students. Some teachers are certified in bilingual education, but are teaching in regular (not bilingual) classrooms. According to a regional study carried out in the West and South (Carpenter-Huffman and Samulon, 1981, 2.0), 19 percent of the regular classroom teachers held bilingual teaching certification, but were not providing bilingual services. The situation had not changed when Pelavin Associates (1991, 44.0) reported large numbers of teachers whose primary assignment was different from their training. Only 33 percent of teachers whose highest degree was in bilingual education and 55 percent of those whose highest degree was in ESL had primary teaching assignments in their fields. Pelavin Associates (1991, 44.0) also found that many teachers with education and training in Bilingual Education or English as Second Language did not have primary teaching assignments in these areas.

In data from the SASS study reported by Bobbitt and McMillen and cited in Zehler (1991, 43.0), the findings were that 35 percent of bilingual education and ESL teachers had both majored in the field and were certified to teach in it. Of the remaining 65

percent of teachers, 56 percent had not majored in the field but were certified in it, while 6.5 percent had neither majored in the field nor were they certified in it.

Others have pointed out similar gaps in certification. In the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students, Young et al. (1984, 21.1) reported that although 94 percent of teachers of language minority LEP students were state certified to teach in elementary school, only 28 percent had credentials in bilingual education and 6 percent had ESL credentials. Cardenas et al. (1983, 10.2), in describing Title VII-funded projects, reported that almost 90 percent of bilingual classroom teachers and 70 percent of resource teachers were certified to teach in elementary school. Nevertheless, only 40 percent of the classroom teachers and 30 percent of the resource teachers held certification in bilingual education.

For classroom teachers who use the student's native language for teaching, certification differed depending on the nature of the program in which the teacher worked; it also varied by the language used (Cardenas et al., 1983, 10.2). Similarly, Ramirez et al (1991, 38.10) noted that teachers working with LEP students within late-exit programs as were more likely to have credentials in bilingual education and/or ESL compared to early exit and immersion programs.

Schools participating in Title VII grant programs that provide instructional services to LEP Native American students showed similar trends with respect to general certification, but fewer teachers were specifically qualified to work with language minority LEP students. Rudes et al (1988, 30.1) reported that for grades 1 and 3, 96 percent and 100 percent of the teachers were state certified as teachers, respectively. However, less than 5 percent of the main teachers and 10 percent of the auxiliary teachers in grades 1 and 3 were certified in bilingual education or ESL.

Findings of these studies suggest a need for definition and consistency across districts and states in teacher certification requirements, both in general and for teachers working with specific populations such as language minority LEP students.

Training

Despite the numbers of teachers with bachelor's and master's degrees, shortages of teachers qualified to teach language minority LEP students continue. To provide services to the language minority LEP student population, projects employ various combinations of programs to build capacity to serve LEP students effectively, including providing preservice and inservice activities and workshops, services of consultants, attendance at conferences, and enrolling staff in outside programs, such as those offered by colleges and universities. Young et al. (1984, 21.1) reported that about 60 percent of teachers of language minority LEP students and 56 percent of paraprofessionals who worked with language minority LEP students had received college or inservice training related to their work.

In a three-part study describing and implementing inservice staff development approaches applicable to LEAs serving language minority LEP students (Arawak Consulting Corporation, 1986, 22.2 and 22.3), researchers found that inservice programs varied widely. In examining training, Cardenas et al. (1983, 10.2) found that about one-half of the classroom teachers and a little over 60 percent of resource teachers surveyed in Title VII-funded bilingual education projects had received some inservice training.

Riccobono et al. (1992, 51.0) gathered data on the Title VII Educational Personnel Training Programs. These training programs, carried out at four-year colleges and universities, support training of education personnel and parents to meet the needs of limited English proficient students. Most projects offered a Master's degree, about half offered a Bachelor's degree, and about one-third offered endorsements (either alone or in combination with a degree program). Bilingual education coursework and proficiency in a language other than English were required for the bilingual education programs; the ESL programs required coursework in ESL methods and did not require proficiency in another language. Almost two-thirds of the programs provided training in both bilingual education and ESL.

Most graduates of these projects had positions as educational professionals serving LEP students. The endorsement programs typically required 12 to 18 semester credit hours of coursework and were seen as a cost-effective route to producing qualified teachers of LEP students. However, Riccobono et al. pointed out that the endorsement programs do not offer enough coursework to adequately prepare qualified bilingual education or ESL teachers. In addition, since they target teachers who are already certified, they do not address the need for newly qualified teachers of LEP students.

To prepare teachers for current or anticipated shortages in bilingual education or ESL, some districts (3 percent) offer free retraining in bilingual education and ESL. The likelihood of a district offering retraining varied by region, district size, percentage of minority students enrolled, percentage of minority teachers on staff, and the teaching field. The west and south regions offered the most retraining programs in public districts, with 6 percent and 4.9 percent respectively (Choy et al., 1992, 54.0).

Training also appears to vary by language and grade level. Young et al. (1986, 21.2) found, for example, that teachers of Chinese speaking students were less likely to have taken courses related to language minority LEP student instruction than those teaching students with other native languages. However, in grade 1, a larger percentage of teachers of Chinese speaking students than teachers of other language groups (62 percent) took preservice or inservice training related to the instruction of their students. Brush et al. (1993, 60.0) in describing characteristics of 15 preschool projects funded under the Bilingual Education Special Populations Program, found that all of them provided inservice training, as do most Title VII-funded training programs. Inservice workshops usually focused on such topics as early childhood development, multicultural approaches to early childhood education, bilingual and ESL approaches and activities. For almost all of the Title VII-funded projects surveyed by Cardenas

et al. (1983, 10.2), inservice training was provided that included methods for teaching content subjects to LEP students.

One approach to expanding the pool of teachers who are skilled in working with LEP students, especially when there is a focus on content area instruction, is to identify effective content-area teachers and provide special training to them in strategies for instruction of LEP students. This was an approach taken by some of the exemplary Special Alternative Instructional Programs (SAIPs) studied by Tikunoff et al. (1991, 46.3). The SAIP programs actively recruited teachers known to be effective in content areas, and offered them training in English-language development strategies. The programs also offered training related to knowledge and skills of instruction for LEP students to all teachers in the school in which the program was located. Such staff development included dealing with cultural transition; language learning difficulties; strategies for instructing LEP students; and issues, approaches, and techniques for improving LEP services.

Attitudes, Beliefs, Philosophy

Teachers' philosophies and beliefs have been related to how they implement programs and to their use of practical applications in the classroom (Rueda and Garcia, 1992, 56.0). Rueda and Garcia (1992, 56.0) noted that a paradigmatic shift is occurring in the definition of effective instructional practices toward an emphasis on sociocultural approaches, toward a more "holistic/experiential/meaning-oriented" direction as compared with more traditional, reductionist approaches in which students' learning is defined as the mastery of hierarchically ordered, discrete abilities. Their concern is with the implications of this shift for assessment, especially for the implementation of the new alternative assessment approaches. Rueda and Garcia point out that although the implementation of the innovative assessment measures proposed require substantial change in the belief systems and understandings of the teachers who will use them, these belief systems have not been examined.

They therefore studied the beliefs of teachers regarding assessment, and found discrepancies between teacher beliefs on the whole and current educational initiatives. Rueda and Garcia conclude that new assessment initiatives will not be successfully implemented unless attention is given to teachers' existing belief systems and understandings. To promote change in these belief systems is not simple, and opportunities for teachers to experience success in the use of new approaches is on possible approach to assisting teachers in moving toward changed perspectives.

The beliefs held by staff within a district can be associated with different patterns of services provided. Strang and Carlson (1991, 40.0) suggest that staff qualifications and training are linked to district philosophy. In a study of Chapter 1 services for LEP students, they found that two underlying philosophical patterns in districts were related to service patterns, including staff qualifications. One philosophical approach deemed that services should be sequential, and that language deficiencies should be

addressed before other learning problems could be identified. In the other philosophical approach, staff believed that academic deficiencies could be identified and addressed regardless of English proficiency and that students could receive services simultaneously. These philosophies affected not only services to LEP students but were also linked to staff qualifications. In districts believing that services should be sequential, there was a wide variation in teacher training, but most had no bilingual or ESL-trained staff working in Chapter 1 projects. In districts where services were simultaneous, Chapter 1 staff tended to teach bilingually or were trained in ESL techniques.

Ramirez et al (1991, 38.1), in looking at specific approaches to teaching language minority LEP students, concurred that teacher attitudes tended to fit with the underlying rationale of their respective instructional models. In addition, Young et al. (1984, 21.1) reported that teachers who spoke another language and those with credentials in bilingual education were likely to emphasize the importance of using a native language as part of their teaching philosophy.

These studies suggest the importance of examining the beliefs and understandings of teachers as an important prerequisite to the implementation of specific practices or approaches. The data indicate that teacher practices will generally be aligned with teachers' beliefs; thus to implement significant change in practice, it is important to recognize the need to promote change in beliefs.

Teacher Collaboration and Implementation of Change

Attitudes and practices are more likely to change, and training seems to be particularly successful, when teachers are actively involved in the planning phase as well as in implementation. Several studies point to the benefits of active teacher collaboration with each other, with researchers, and with students. In an ethnographic study of household and classroom life, Moll et al. (1990, 39.6) found that providing teachers with information and models is insufficient to bring about change. Teachers must work together to reflect and create conditions for change that relate to their particular situations. Researchers found that the key to developing and carrying out innovation was involving teachers in the research process. As teachers became involved in the research process, teacher study groups were used as vehicles for creating conditions for change in the classroom and teachers acted as resources for each other.

The Innovative Approaches Project, Rivera and Zehler (1990, 39.7) involved the collaboration of researchers and teachers within four innovative instructional and intervention models. In their handbook describing the AIM for the BESt Assessment and Intervention Model, Ortiz et al. (1991, 39.8) describe an innovative model with a Student/Teacher Assistance Team (S/TAT) component. The S/TAT was a school-based problem-solving team of students and teachers that reviewed learning and behavior problems and assisted in developing problem-solving approaches. Ortiz et al. (1991, 39.9) noted the ease of implementation of model components and its

acceptance by teachers and assessment personnel, as well as the benefits to staff, of the use of the model's collaborative interaction.

A critical component in the implementation of the scientific inquiry model entitled "Cheche Konnen" (Warren et al., 1990, 39.3), was the teacher enhancement process. To help teachers feel comfortable with science content and methods of inquiry, researchers encouraged teachers to use a variety of materials other than textbooks. They encouraged both bilingual and ESL teachers to use vocabulary for developing concepts. And they encouraged teachers to shift from traditional teacher-centered methods to student-centered inquiry. By working closely with the teachers, helping them to develop their content knowledge and to develop ways to work with students, the researchers succeeded in building the teachers' confidence and beliefs in an investigation-based approach to science (Rivera and Zehler, 1990, 39.7). Thus, such researcher and teacher collaboration, as described in these studies, is a stimulating model, likely to lead to innovative and successful practices.

C. Findings Specific to Asian Pacific American Students

Only two studies that included findings on teachers of Asian Pacific American students were reviewed. Young et al. (1986, 21.2) examined the effectiveness of educational services to language minority, LEP students. They found that teachers of Chinese speaking students were less likely to have taken courses in the instruction of language minority limited English proficient students than those teaching students with other native languages. On the other hand, grade 1 teachers of Chinese speaking students were more likely than others to have recently taken preservice or inservice training for working with their students.

In a study of Bilingual Education in the United States Pacific Islands, Freese and Woltag (1984, 15.0) found that because of the linguistic diversity of the islands, English is a second language used primarily for academic purposes, and all the islands provide bilingual education services. They found that teachers in the Pacific Islands have varying degrees of English proficiency, and the vernacular is used for instruction through grade 5 and as part of the curriculum.

In the same study, Freese and Woltag (1984, 15.0) found that the English proficiency of the teachers needed to be improved, especially for those teachers assigned to multilingual classrooms. Also, because there is no system of substitute teachers, the high rate of absenteeism among teachers affected instructional services for all students. They recommended development of many aspects of the bilingual services, including program evaluation and teacher training in ESL methods and in the English language for these teachers.

With respect to teachers, there is a gap in research that focuses on those of Asian Pacific heritage. More research on Asian Pacific American teachers is needed, and this is particularly timely as the diversity of the student population increases.

D. Summary

Teacher level findings show considerable variation with respect to background, certification, training, and attitudes. Although almost all teachers hold bachelor's degrees and are state-certified to teach, and many hold a higher degree, there is a lack of standardization in education and certification for teachers of language minority, LEP students.

Overall, about one-half of the teachers of language minority, LEP students speak the native language of their students. However, the level of language proficiency of these teachers seems to vary by program approach as well as by language (Young et al., 1984, 21.1). Teachers' language background and proficiency may contribute to the effectiveness of services. For example in successful projects such as exemplary SAIPs, most teachers were proficient enough to use the students' native language to support concept development (Tikunoff et al., 1991, 46.2).

Statistics on teacher certification vary by study and depend on the target populations and samples, as well as the definition of the term certification. However, the generally low percentages of teachers serving language minority LEP students who are certified in bilingual education or ESL suggest a need for better qualifications and training for teachers of these students.

The shortage of qualified teachers has been somewhat offset by an assortment of training programs designed to improve teachers' approaches to working with language minority LEP students. The combination of preservice and inservice activities, workshops, consultant services, conferences, and outside programs provides a positive avenue for improving teacher qualifications and services for language minority LEP students. Training activities include not only training in bilingual education and ESL techniques, but also in methods for teaching academic subjects to students with limited proficiency in English. Some SAIP projects took a different approach in recruiting teachers who were excellent in content areas and providing training in language development strategies. Although guidelines for training bilingual/bicultural teachers were developed in 1974, training activities vary widely across projects and are probably related to such factors as the number of language minority, LEP students in the school or district, language, and grade level. Training is also related to the underlying philosophical approach to the teaching-learning process as well as to the particular instructional approaches utilized. Training appears to be most successful when teachers are involved in the planning phases as well as the implementation of the training.

Teacher attitudes, beliefs, and philosophy may also advance or impede service delivery. The findings of two studies (Rueda and Garcia, 1992, 56.0; Strang and Carlson, 1991, 40.0) link underlying beliefs about learning to classroom applications and staff preparation. Teachers who believe children learn language and academic content sequentially tended to use approaches that reflect these beliefs, e.g., sequenced

mastery of discrete skills, more use of rote and drill methods. Districts following this philosophical approach had few bilingual education or ESL trained teachers providing services within Chapter 1 and little emphasis on providing Chapter 1 services to language minority LEP students. On the other hand, teachers believing that learning of language and content can occur simultaneously when presented within meaningful contexts, tended to provide services simultaneously, to allow LEP students to be served by Chapter 1, and to be involved in more holistic programs that actively involve the child. Thus districts with this philosophy usually provided language and compensatory services simultaneously, and had staff trained in bilingual education services and ESL techniques.

As with other findings, teacher beliefs and attitudes varied considerably. Findings of successfully implemented innovative approaches (e.g., Warren et al., 1990, 39.3) suggest a link between teachers' beliefs and attitudes and their decisionmaking and practices in the classroom. Experience in making changes in the classroom led to changes in the teachers' level of confidence in the approach and in their ability to implement it. The findings of this study as well as findings of Rueda and Garcia (1992, 56.0) imply that change in classroom practices are tied to change in beliefs. Teacher collaboration in defining new instructional approaches is another model for implementing change and developing teacher beliefs and attitudes that support that change (e.g, Moll et al., 1990, 39.6). The results of research such as these demonstrate that simply providing teachers with information and models is not sufficient to bring about change in instructional practice.

V. INSTRUCTIONAL FINDINGS

A. Overview of the Studies

The current school reform movement has set the year 2000 for the accomplishment of significant educational goals, including improved literacy and graduation rates, and demonstrated academic competence. The successful implementation of these goals relies heavily on the provision of quality instruction to all students, including language minority LEP populations. When one considers that a substantial number of these students fail to meet the achievement levels of their non-LEP peers, the education of these students becomes even more important. Over a decade ago, O'Malley (1982, 6.0) noted that an estimated 52% of LEP students ages 5-14 were one-half year or more below grade level in English reading. Studies since then have reported similar findings (Cox et. al, 1992, 55.1; Carlson and Strang, 1988, 32.0). Teacher reports from these studies have suggested that a number of language minority students have sufficiently low English proficiency to inhibit classroom learning. The 1988 study by Carlson and Strang (32.0) also reported low levels of math and native language skills among language minority LEP students. Preliminary findings from a national longitudinal study of Chapter 1 services to be conducted over a six-year period (Puma et al., 1993, 58.2) indicate that the gap between LEP and non-LEP achievement is not narrowing. A greater number of LEP students compared with non-LEP scored below the 35th percentile on the Comprehensive Test of Basic Skills (CTBS), a standard measure of achievement. LEP students are also more likely to be economically disadvantaged (Burkheimer, 1989, 34.2; Puma et al., 1993, 58.2). Since factors such as SES and language proficiency influence educational achievement (Birman and Ginsburg, 1981, 5.0; Rosenthal et al., 1981, 3.0), the extent to which LEP students receive instruction that addresses their needs, and the characteristics and outcomes of the instructional programs provided to them, have been the focus of a substantial amount of research.

This chapter discusses the results of a review of 57 federally funded studies on the instruction of language minority and limited English proficient students. Findings are organized into the following categories: numbers of students in special programs; types of instruction; characteristics of effective instruction; outcomes of instruction; and materials development. Findings specific to Asian Pacific American populations are also discussed, along with a final summary and recommendations section.

B. Review of the Findings

One of the initial questions addressed by the federally funded studies in this review was simply: Are limited English proficient students receiving special services? This question was addressed by three studies that were focussed on services specifically designed for language minority LEP students.

However, many LEP students receive instruction through compensatory education programs, such as the Chapter 1 or Migrant Education programs; in fact, Cardenas et al. (1983, 10.2) noted that more LEP students received Chapter 1 services than received services through Title VII. Four of the studies in this review, all conducted within the past five years, were focused on Chapter 1 and Chapter 1 Migrant Education programs and report data related to the instruction of limited English proficient students.

Numbers of language minority LEP students in special programs. The Children's English and Services Study (O'Malley, 1982, 6.0), a study by Cardenas et al. (1983, 10.2), along with a later study by Development Associates (1984, 21.1; 1986, 21.2) attempted to estimate the number of language minority LEP students within Title VII or other bilingual/ESL programs. The O'Malley study, based on information collected from schools throughout the United States, concluded that about one-third (34%) of limited English proficient children ages 5-14 receive special instruction, including ESL and bilingual education. A small percentage of LEP students (10%) were served by Title VII-funded programs. One limitation of the O'Malley study was that the measure of limited English proficiency used -- a specially-constructed test of speaking, understanding, reading and writing in English -- was not the same as that used by the Local Education Agencies in the study.

Cardenas et al. (1983, 10.2), in a study of all 524 Title VII basic bilingual education programs funded during 1980-1981, reported that the number of LEP students served in 1980 was between 160,000 and 200,000. Most of the students were Spanish-speaking, although other language groups, such as Asian and American Indian, were increasingly represented.

One purpose of the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students[1] (Young et al., 1984, 21.1; 1986, 21.2) was to develop a comprehensive database of descriptive information on the range of services provided to elementary language minority LEP students in public schools. Using data collected from states, districts, schools, teachers, and students, the researchers estimated that the number of language minority LEP students provided with special services in grades K through 6 during 1983-1984 was 724,000 out of an estimated 882,000 (94%). Three-fourths of these students (76%) were Spanish-language speakers.

Numbers of language minority LEP students served within compensatory education. Many limited English proficient students are served within Chapter 1 compensatory education programs; these programs provide remedial education services primarily to elementary school students (Strang and Carlson, 1991, 40.0). Elementary schools that offer both special programs for language minority LEP and

[1]Hereafter referred to as the "National Longitudinal Study".

Chapter 1 ESL tend to be poor, urban schools with a high percentage of language minority LEP students.

The exact number of limited English proficient students served by compensatory education programs is not known. The O' Malley (1982, 6.0) study had reported that 24% of all LEP students received ESEA Title I (i.e., what is now Chapter 1). Carlson and Strang (1988, 32.0) determined that one-third (33%) of Chapter 1 public elementary schools enroll language minority LEP students; 72% of these provide some special language service. A summary of 1988-1989 State Performance Reports describing Chapter 1 programs (Sinclair and Gutmann, 1991, 42.0) found that across 20 states and the District of Columbia, 8 percent of Chapter 1 participants were classified as limited English proficient. Puma et al. (1993, 58.2), using data collected from first and third grade cohorts of students enrolled in Chapter 1, reported a higher percentage -- 11 to 17 percent of the first grade cohort and one-third of the third grade cohort were identified as LEP. The authors noted that the percentage of language minority LEP were probably underestimated for the first grade cohort because of the absence of data.

The amount of Chapter 1 instruction that a limited English proficient student receives is closely related to the district's program design and resources. In some districts, a prescribed level of English language proficiency needs to be reached before the limited English proficient student can be served by Chapter 1. In others, limited English proficient services and Chapter 1 services may be received simultaneously. The latter was the case in 22% of the schools from a study on Chapter 1 services (Carlson and Strang, 1988, 32.0). Carlson and Strang also noted that about one-third of Chapter 1 public elementary schools enroll language minority LEP students. Of these schools, 82 percent provide some special language services, including Chapter 1 ESL, while 18 percent do not provide any special services for LEP students. In addition to regular Chapter 1, 50 percent of Chapter 1 schools offer only non-Chapter 1 funded special services to LEP students; ten percent offer only Chapter 1 ESL, and 22 percent offer both Chapter 1 ESL and special services for LEP students funded through other sources. However, Carlson and Strang note that the data in the study were collected at the school or district level, rather than at the student level. The pattern of services just described therefore represent the types of services offered, and conclusions about the services received by students could not be made based on these data.

The Chapter 1 Migrant Education Program funds State Education services for children of migrant workers. In a nationally representative, descriptive study of the student, staff, and administrative characteristics of Chapter 1 Migrant Education Programs, about 1 percent of the total school population, or 597,000 students, received migrant services in 1990 (Cox, 1992, 55.1). Teacher rating data in this study indicated that approximately 40 percent of migrant students lacked full proficiency in oral English such that it interfered with their ability to participate in instruction. About three percent of regular school year and nine percent of summer-term migrant students were reported to neither speak nor understand English (Cox, 1992, 55.1).

The results of the Carlson and Strang study (1988, 32.0) showed that 4% of first grade language minority LEP and 3% of third graders received services through Migrant Education funding.

Differences in the numbers of LEP program recipients among these studies stem from differences in definitions of terms, the inclusion of all language minority with the LEP populations and the variation in grades included in each study. These differences not only inhibit the ability to make comparisons for the purposes of research, but also reflect the potential likelihood that students needing more than one type of instruction are receiving only one service (or perhaps none).

The extent of coordination (or lack) between Chapter 1, Chapter 1 Migrant Education programs and LEP services and what this means to an individual student has generally not been addressed by the research reviewed. More data is needed on what overall configuration of services is received by LEP students when there are combinations of programs present that can address their needs as students from disadvantaged or migrant backgrounds and as students without full proficiency in English. Data on the sets of services received by students, how these are determined, and information on the nature and extent of coordination of such special services would provide a much clearer picture of the services actually provided to LEP students.

Types of Instructional Services

A majority of the studies reviewed were directed toward answering the question of what type of programs and services are being provided. Among these federally funded studies, a typical demarcation among programs for limited English proficient students was the extent to which they followed an ESL or a bilingual model. Both labels, however, are used to refer to programs that employ an often overlapping variety of instructional approaches; in actual practice it is not possible to estimate numbers of programs or develop comparisons of program effectiveness based on how programs are labeled.

In general, there has been the assumption that ESL is instruction in English about the formal structure of the English language. Nonetheless, at least one study suggested that ESL instruction may include some use of the students' native (Birman and Ginsburg, 1981, 5.0). Bilingual instruction implies in its simplest form that there is instruction in two languages. However, few authors advocated such a modest definition, and the different goals of the bilingual instruction provided can have implications for the actual level of native language use. In any study on types of instructional services provided to LEP students, then, careful attention must be given to how the instructional services are defined and described.

Nieves-Squires and Goodrich (1980, 1.1), in planning the Bilingual Instructional Features Study, defined bilingual education as "the formal and informal process of instruction that the language minority student in the primary or secondary school

years encounters, and that have tangible consequences for the language development of the students". This definition includes mainstream monolingual education as part of the whole scope of student experience. It stands in contrast to definitions implied or explicitly stated which suggest that bilingual education is a transitional process whereby two languages are used to assist in the acquisition of English and the improvement of academic performance (e.g., Cardenas, 1983, **10.2**).

A number of studies used more complex typologies based on the extent to which the native language was used for instruction and the purposes for which it was used (e.g., Development Associates,1984 **21.1**; 1986, **21.2**). The approach used in this study to define services was based on the premise that it is necessary to determine the critical variables for defining services and then to describe the instruction received in terms of these variables.

Several of the studies included in this review described Title VII programs in particular (Cardenas, 1983, **10.1, 10.2**; Rudes, 1988, **30.1**; Young et al., 1988, **30.2**; Atlantic Resources, 1992, **50.0**; Brush, 1993, **60.0**). One of the earliest of these descriptive studies was the 1983 survey of basic bilingual education programs (Cardenas, 1983, **10.1, 10.2**). Based on data obtained from mail questionnaires completed by 524 project directors and from visits to 60 sites, the authors concluded that there was substantial variation in instructional approaches both within and across projects. A typical classroom contained a heterogeneous group of students who varied in language background and proficiency.

The National Evaluation of Services for Limited English Proficient Native American Students (Rudes, 1988, **30.1**; Young et al., 1988, **30.2**) provided an analytic description of the instruction provided to elementary grade level students in schools receiving Title VII funding. Of 56 projects, the most frequent service reported was the provision of bilingual aides or translators (51%) or ESL aides (7%). Slightly less than half (47%) of the projects developed or acquired instructional materials appropriate for Native American students. Other services included community/parent development (32%), cultural heritage instruction (27%), staff development (25%), and computer-assisted instruction (25%).

Brush (1993, **60.0**) recently described the characteristics of all 30 projects funded during FY 1990 under the Title VII Special Populations Preschool Program. Findings based on fifteen of the projects suggested that they differed not only in their philosophy of bilingual education, but also in the ways in which that philosophy was incorporated into the classroom. Still, each of the projects had an active parent component and links to schools or other community organizations.

Two other studies of federally funded programs reported significant project differences in the implementation of instructional services. The Descriptive Study of the Family English Literacy Program (Atlantic Resources, 1992, **50.0**) described Title VII Family English Literacy (FEL) projects funded from 1985 to 1989. Although the goal of the FEL program is to help the families of language minority LEP children

become literate, the way in which that goal was pursued varied among the 54 different projects. Nevertheless, there were similar implementation strategies and outcomes across projects. The majority of FEL projects used word-of-mouth to recruit participants. The program appears to be successful in improving both literacy and family relationships.

The focus of the majority of studies has been on LEP students within public schools. There has not been as much data gathered on LEP students and special services for LEP students within non-public schools. One study in this review, a Study of Bilingual Instructional Practices in Nonpublic Schools (Elford and Woodford, 1982, 8.0), focussed specifically on the type of instruction received by language minority LEP students in private schools. The authors identified the range of bilingual education support services that are available in nonpublic schools throughout the United States. Their findings, based on site visits to 24 nonpublic schools, indicated that a limited number of private schools employ innovative language learning practices; most rely on standard instructional strategies. Elford and Woodford suggest that the lack of innovation may be because nonpublic schools have limited involvement with Title VII, and most of their aid is from (old) Title I and Title IV (library) sources.

In response to the diversity of teaching situations, purposes of English language instruction, and resources available, many practitioners tend not to identify with any one instructional approach, but use a combination or eclectic approach (Chamot and Stewner-Manzanares, 1985, 20.0). Ideally, the choice of an instructional approach should be based on the instructional objectives. For example, approaches that rely on oral communication may be best suited to oral language development, while cognitive and content based approaches may facilitate academic skills. Perhaps, the effective teacher is one who is familiar with the range of approaches and can effectively judge which is appropriate in a given circumstance.

The structure of services. The way in which instruction is provided is another way to define services to limited English proficient students. Most frequently, programs for limited English proficient students provide services through self-contained or pull-out classes (Carpenter-Huffman and Samulon, 1981, 2.0). Self-contained classes may be defined as instruction in one setting with a teacher and/or aide. Pull-out instruction may also be provided by a teacher or aide, but the student is taken out of "regular" class for a period of time. Findings from a descriptive study of a representative sample of basic Title VII projects (Cardenas et al., 1983, 10.2) found that nearly 40% of the projects surveyed used a pull-out model for special instructional services for limited English proficient students. At higher grades (3-6), a pull-out approach was much more frequent than at the lower grade levels (K-2).

Typically, but not always, pull-out is a response to district policy that calls for mainstreaming as quickly as possible. Districts with a small number of LEP students may also be more cost-effectively served by this method. Pullout tends to be more

prevalent with some subjects or programs than others. One fourth (23%) of the ESL teachers surveyed in the Cardenas (1983, 10.2) study reported that this method was used more often for ESL than for other subjects. In one view, pullout is a less coherent, more fragmented type of service, while a self-contained class is more consistent with the overall goals of the school curriculum.
Students who attend pull-out classes may also receive less total special instruction. The Carpenter-Huffman study (1981, 2.0) found that elementary students in bilingual, self-contained classrooms received more language assistance than did students in pull-out programs.

The services provided to LEP students may be comprised of services from more than one special program and the quality of services provided under some programs may be very different. For example, Carlson and Strang, in their 1988 study (32.0), found that Chapter 1 ESL services included less time for instruction, smaller groups, and fewer teachers with bilingual education or ESL credentials when compared to other special services for LEP students. Chapter 1 funded instruction was also less likely to be in the students' native language.

To obtain a clear picture of what configurations of services are received by individual students, it is necessary to move from a school-, district-, or program- level focus, to an individual or student focus. The different programs comprising the services provided, the service delivery model (e.g., pull-out, in-class, newcomer center) and the type and extent of coordination among them may have important implications for student achievement. For the most part, however, a student-level focus has not been used in the research reviewed, with the exception of the National Longitudinal Study (Young et al., 1984, 21.1; 1986, 21.2).

Review of the evidence for program effectiveness

One of the three main research categories identified by the reauthorization of the Bilingual Education Act in 1978 was research to improve the effectiveness of services for LEP students. Several of the federally funded studies have focussed on the question of which service types are most effective. A review of the literature on the effectiveness of bilingual education (Baker and deKanter, 1981, 4.0) analyzed over 300 documents and identified 28 studies which they believed were sufficiently sound in methodological design to be included. Baker and deKanter tallied the results of evaluations comparing transitional bilingual education to results of studies on ESL, Immersion, or Structured Immersion programs, examining whether TBE outcomes were positive, negative or showed no difference. On the basis of this comparison, they concluded that there was no empirical evidence that transitional bilingual education increased the performance of limited English proficient students. The Baker and deKanter study has been criticized for the method employed (c.f., Willig, 1985, who conducted a meta-analysis of studies; Elford and Woodford, 1982, 8.0).

Birman and Ginsburg (1981, 5.0), based on an overview of six studies addressing federal policy toward language minority students as well as other research, reached conclusions similar to Baker and deKanter. The authors recommend that, since transitional bilingual education has been promoted without extensive evidence of its effectiveness, federal support for language services should be extended to other types of approaches and structures which may benefit specific limited English proficient populations. Giving states and schools the flexibility to decide the type of service most appropriate for their limited English proficient population may reduce constraints faced by school districts in providing federally mandated services, particularly given other implementation constraints. Districts vary widely in patterns and levels of language use, numbers of students and qualified staff, method of service delivery, and coordination of services. The value placed on the native language by the community and parents may also influence the services offered.

Pelavin Associates (1985, 19.0) considered the effectiveness of federally funded bilingual education programs in a review of research, including 4 large-scale evaluation studies completed between 1973 and 1984. Their findings were mixed: although there were mainly positive effects, English language proficiency and achievement varied among the Title VII projects. More recently, the General Accounting Office (1987, 24.0), based on a review of bilingual education research by independent experts, concluded that adequate and reliable evidence existed to warrant legal requirements for native language instruction.

National comparisons of different types of instructional services. The results of the Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children (Ramirez et al., 1991, 38.2-4) compared English language proficiency and academic achievement for three different types of instructional approaches: structured immersion (in which all instruction is in English and is provided by teachers with special training in meeting the needs of LEP students); early-exit programs (where there is initial use of the native language for instruction and clarification of instruction with transition to all English within about two to three years); and late-exit programs (in which there is a minimum of 40 percent of instruction provided in the students' native language and students stay in the program through sixth grade).

The study further reported that all three program types were effective in promoting improved student growth in mathematics skills, English language skills, and English reading compared to at-risk students in the general population. However, differences in the rates of growth found for the three different programs were noted. Over years one to three, students in the immersion and early-exit programs showed growth rates that paralleled those of the non-LEP student population in the same grades, i.e., a gradual slowing of the rate of growth with an increase in grade level. The results for students in the late-exit programs also showed growth in the achievement outcomes measures but, rather than deceleration, suggested continued acceleration in the rate of growth. The study findings also showed more parent involvement with

homework for students in the late-exit group, a finding that would be expected to promote student achievement.

Ramirez et al. (1991, 38.2-4) noted that the instructional environments provided across all three program types were passive in nature and did not provide opportunities for active student language use or for student development of higher-order thinking skills. Meyer and Feinberg, in a review of the Immersion Study, conclude that the comparisons of structured immersion and early-exit programs are the most appropriate, and view with caution the comparisons that involve programs from different schools and districts. Since the late-exit programs in the study were from districts without any alternative programs for comparison, Meyer and Feinberg do not place confidence in the results for these comparisons.

The National Longitudinal Evaluation of the Effectiveness of Services for Language Minority LEP Students (Young et al., 1984, 21.1; 1986, 21.2) defined "clusters" of instructional services characterized by the extent of native language and English language used for instruction, the rate of transition to English, the presence of special instruction in English, and whether instruction in the native language arts was provided. Five clusters were identified, ranging from those with extensive (90%) use of the native language throughout the school year to clusters in which all instruction is provided in English with no special services. The study found that for grade 1 students most schools (51 percent) offered services in which all instruction was in English and special instruction in the English language was provided; however, the type of service most frequently received by students (40 percent of students) was one that involved some use of the native language with later transition to English. LEP students were at-risk academically, performing below grade level in native language skills as well as in English and other subjects.

Burkheimer et al. (1989, 34.2), analyzed findings from the National Longitudinal (Young et al., 1984, 21.1; 1986, 21.2), and reported that oral English proficiency was related to a number of individual and home background characteristics. Children with higher oral English proficiency were more likely to have lived in the U.S. longer, used English more in their homes, been enrolled in school longer, and received more years of LEP services. Oral native language proficiency was not strongly related to any other variables. The correlations among other individual and home background characteristics were generally weak. High SES families had greater aspirations for their children's education, used more English at home, and were more likely to spend time on homework or reading; however, none of these factors were found to affect English language arts or math achievement in any significant or consistent way.

Data collected from two cohorts of Spanish-speaking LEP students (first and third grade) demonstrated that instruction heavily concentrated in only one subject area was found to negatively affect achievement levels of LEP students in other areas. In addition, students were found to benefit the most when provided with services at their level and when a variety of instructional approaches were implemented. Services enhancing English language arts achievement, and which paralleled those

of English proficient children, led to a greater likelihood of exit from LEP services. The authors recommended further analyses with major studies restricted to Spanish-speaking students (Burkheimer, 1989, 34.2). The review of this study by Meyer and Feinberg (1992, 57.0) note problems in the analysis of data, and the problems posed by the large number of variables to be taken into account, the high levels of attrition in the sample, and the general difficulty in developing comparisons of programs in a study based on a survey sample rather than a controlled research design.

One of the difficulties in assessing the effect of any instructional service is the degree to which background variables influence success. Some of these variables have been the focus of the research included in this review. For example, Rosenthal et al. (1981, 3.0), analyzed data from the Sustaining Effects Study to examine the relationship of achievement with socioeconomic status and home language background. Based on the results of multiple regression analyses, Rosenthal et al. concluded that socioeconomic status (SES), including family educational and income level, occupation and race, had a greater effect on educational achievement than home language background. Achievement was measured by math and reading scores on the Comprehensive Test of Basic Skills (CTBS) taken at the beginning and end of the school year. The home language background was determined by the language(s) used in the home as well as the predominance of each language. English predominance was used as an approximate measure of English proficiency. Thus, findings such as this point up the difficulties inherent in carrying out large-scale national evaluation studies where there are many such variables that may affect the findings. For comparisons of specific types of approaches, smaller, more focused, studies in which greater control of other factors is possible are more likely to be successful (as recommended by Meyer and Feinberg, 1992, 57.0).

The National Evaluation of Services for LEP Native American Students (Young et al., 1988, 30.2) described the instructional services and academic achievement of elementary grade level limited English proficient students attending schools on or near Indian reservations. This study reported that students receiving special instruction (whether in English or the Indian language) had low SAT scores, even though their academic aptitude was equivalent to, or above, the average. These scores declined or remained the same over the two years of the study, despite the fact that the school had been receiving federal funding (Title VII) targeted at improving student achievement. The researchers first attributed the low scores to evidence that these students had more need of the special services (Rudes et al., 1988, 30.1). However, the authors concluded that further research was necessary since they had not assessed the extent to which school variables played a part in low achievement.

Two factors were later associated with the low test scores of these students: 1) community use of Indian languages and the subsequent low English proficiency; and 2) home/family characteristics such as lack of support for educational achievement. The authors noted that the extreme diversity of language backgrounds in the 56 Title VII projects made it difficult to draw valid generalizations (Young et al., 1988, 30.2).

Achievement within different instructional approaches. Other studies that have been conducted have examined more specific aspects of bilingual education programs. In a longitudinal study (1978-1984) on the teaching of reading to bilingual students from low-income families in Texas (Mace-Matluck et al., 1984, 13.1-13.7), the most effective means of developing the English literacy of bilingual children were described in order to determine ways of increasing the academic achievement of these students. In some programs, early instruction emphasized a phonics approach while other programs viewed reading more holistically. The nature of the instructional program affected the student's language growth and development, as measured by their progress in reading. Reading growth was measured with the Interactive Reading Assessment System which focussed on tasks representative of actual reading, on the student's ability to handle printed materials and formal language, and on coherent and comprehensible texts at all readability levels (Calfee et al., 1984, 13.3).

Hoover (1984, 13.5), as part of the same study, found a relationship between reading readiness and achievement, with literacy development in English more readily transferable to Spanish than from Spanish to English. However, substantial variation in patterns of growth were evident. Hoover also found that reading instruction in either Spanish or English did not differ significantly (Hoover, 1984, 13.6).

Mace-Matluck et al. (1984, 13.4) suggested that language background does have an effect on achievement. Students with initially low English skills showed greater growth in oral English proficiency. In contrast, students with higher Spanish oral proficiency upon entry into school showed more growth in English reading comprehension than those with initially low Spanish oral proficiency.

In the Mathematics and Middle School Students of Mexican Descent: The Effects of Thematically Integrated Instruction study (Henderson and Landesman, 1992, 49.0), the achievement, attitudes, and motivation of seventh-grade students receiving traditional instruction were compared with those in thematically-integrated classrooms. Themes, chosen by both teachers and students, related to the students' present experiences and their concerns about the future (e.g., arts, crime). The researchers found that over a two-year study period, those students receiving thematic instruction surpassed control group students in achievement on mathematical concepts and applications. However, there was no difference between the two groups in students' attitudes toward mathematics.

The degree to which the cultural heritage of the students is incorporated into the classroom instruction may also affect student achievement was one conclusion of a study of 74 Title IV, Part A projects which had cultural instruction or activities components (64 percent of the 115 sampled). The projects contributed to student improvement in several areas, including increased knowledge of, and pride in, Indian culture and heritage, increased knowledge and skills in creative arts and crafts (Reimer et al., 1983, 9.2). However, in the Burkheimer et al. (1989, 34.2) study, results

indicated that the effects of instruction in ethnic heritage on overall achievement were mixed and dependent upon individual student characteristics.

Effects of programs on other outcomes. While the majority of the research included in this review focussed primarily on differences in academic achievement, the effects of various instructional approaches in other areas have also been found. Pelavin Associates, (1985, **19.0**), in their review of federally funded research, concluded that special services for LEP students included a number of indirect benefits, such as a reduction in the drop out rates of limited English proficient students.

One of a series of documents reporting on Part A of the Indian Education Act (Young and Hopstock, 1983, **9.1**) reported no clear findings concerning the impact of Title IV, Part A projects on achievement test scores; however, students who had been served by such projects were more likely to have aspirations for post-secondary education. Although programs were perceived as having an impact on attendance, substantial changes in attendance were not found.

Benefits of the Family English Literacy program for the adults who participated included not only improved English literacy skills, but also increased involvement in their children's education (Atlantic Resources, 1992, **50.0**).

Each of the 4 models that comprise the Innovative Approaches Research Project (IARP) reported affective changes, including improved self-perception and relationships among students, teachers, school and community (Rivera and Zehler, 1990, **39.7**). In particular, the Cheche Konnen ("search for knowledge" in Haitian Creole) project (Warren et al., 1990, **39.3**; 1991; **39.4**), demonstrated affective and attitudinal changes among students and within the overall school community, as well as increased knowledge of scientific concepts. Language minority students who participated in the Assessment and Intervention Model for Bilingual Exceptional Students (AIM for the BESt) showed increased self-confidence and self-esteem as well as improved reading, oral and written proficiency. In addition, special education referrals were reduced. The model defined a school-based assessment system plus instructional approaches that emphasized higher-order thinking skills as a step toward mastery of basic skills (Ortiz et al., 1991, **39.8, 39.9**). The other two models, the Community Knowledge and Classroom Practices Model (Moll, 1990, **114** and **115**) and Partners for Valued Youth (Robeldo, 1990, **110;111**) also reported affective outcomes.

Characteristics of Effective Instruction

A fourth question asked by the studies on instructional services for LEP students concerns was: What are the specific features of an effective instructional program? Several studies (Tikunoff, 1985, **6**; Alexander et al., 1985, **25.0**; Rudes and Willette,

1989, 35.1; Rudes et al., 1990, 35.1; Tikunoff et al., 1991, 46.2; Rivera and Zehler, 1990, 39.7) have defined the attributes of effective programs for language minority and LEP students, and offer information on effective practices in LEP classrooms. Several themes in the findings on characteristics of effective instructional practice are discussed below.

Effective instruction facilitates student comprehension and participation. It is necessary for teachers to understand the kinds of discourse structure that facilitate the participation of LEP students. Mainstream teachers, in particular, are faced with the challenge of integrating LEP students into the classroom interaction, especially the verbal exchanges that take place during instruction. Thus, teacher strategies for helping LEP students to understand and participate in the classroom have been identified in the research.

For example, Tikunoff (1985, 6) described "significant features" of bilingual instruction that were linked with student progress. In particular, these were focused on the behaviors of the teacher that would assist students in understanding and facilitate their learning. These were behaviors such as communicating clearly, obtaining and maintaining student engagement, monitoring progress and providing immediate feedback. Other features identified by Tikunoff were mediation of instruction through use of the native language; integration of English language development with academic skills development; use of the students' home culture in instruction; communication of high expectations to the student; and organization and delivery of instruction that is consistent with instructional goals.

The "Academic Language Talk" study (Simich-Dudgeon, 1988-89, 28.0) also focused on teacher interaction with the student. In this study, the central focus was on the verbal communication between teacher and student. The three-year study identified significant features in the responses of third and sixth grade students who were rated successful communicators and translated these findings into teacher strategies designed to promote language and cognitive development. The teacher handbook developed through this study reports that a structured, predictable classroom routine assists not only the LEP student, but all children in knowing what to expect during instruction. Both teacher-directed and individual and small group activities contributed to successful learning environments for LEP students.

Effective programs make appropriate use of the student's native language. The use of the native language where possible has been indicated as an effective tool for assisting LEP students in the classroom. Chamot (1985, 8) recommended the use of native language support to improve the effectiveness of ESL programs. Tikunoff (1985, 6) also identified use of the native language for instruction as an attribute of effective instruction. The use of the native language for instruction, rather than delaying a student's progress in English, appears to assist in English language development and academic development.

Positive transfer effects of native language instruction on English reading proficiency were suggested by results from the Teaching Reading to Bilingual Children Study (Mace-Matluck et al., 1984, 13.4). The English language skills of students in bilingual programs increased more rapidly than their Spanish language skills. In the analysis of the data from the National Longitudinal Study (Burkheimer, 1989, 34.1;34.2) results indicated that students who initially had low levels of oral English proficiency benefitted from the use of their native language for English (and native) language arts instruction. Some support was also provided by the Ramirez et al. (1991, 38.4) comparison of three instructional approaches: structured English immersion (which use English almost exclusively as a language of instruction); and early and late-exit transitional bilingual education programs (which use the students' native language). Ramirez et al. noted that significant amounts of primary language instruction (at least 40 percent) can be provided to LEP students without impeding their acquisition of English language and reading skills. In fact, LEP students who were provided with substantial instruction in their native language continued to increase their achievement in content areas such as mathematics, while students who were quickly transitioned into English-only classes tended to progress at rates that were slower than the norming population.

However, in determining how and when to include native language instruction, the background and needs of the student and the existing resources must be considered. For example, the results from the 1984-1987 analysis of the data from the National Longitudinal Study (Burkheimer, 1989, 34.2) suggest that different approaches are more appropriate depending on student characteristics, such as level of oral proficiency or achievement. Data collected from selected schools and districts indicated that students who received instruction specifically geared to their skill level showed greater achievement in math and language arts.

In practice, English language development is the focus of most instructional services. O'Malley (1982, 6.0) concluded that the aim of federal and state support has not been to maintain the native language, but rather to increase English language proficiency. Both English-medium and bilingual classes included in the Children's English and Services Study provided relatively equal amounts of English language instruction. Nearly all (97%) of the Title VII projects interviewed by Cardenas et al. (1983, 10.2) indicated that at least one objective was to increase English language skills. A smaller percentage (67%) stated that native language skills were a project goal. Similar findings were reported by Young et al. (1984, 21.1) and Rudes et al. (1988, 30.1).

Overall, the goal of English language development was reflected in the relatively large amounts of English language instruction provided to the students in these studies. In a study of 58 classrooms serving English proficient and limited English proficient students from six ethnolinguistic groups, Fisher et al. (1981, 18.1) found that English was used, on average, 60 percent of the time by students and instructional staff. Ramirez et al. (1991, 38.4, 38.2), in a comparison of early and late-exit transitional bilingual education and structured English immersion programs,

found that English was used substantially not only within immersion strategy classrooms (94.3%-98.6%), but also within the other two approaches. The level of English use varied in early-exit and late-exit transitional classrooms, ranging from less than 10% in kindergarten to 94% in one grade six class.

The predominance of a single native language group in a community often results in greater use of that language for instruction. The results of the National Longitudinal Study (Young et al., 1984, **21.1**; 1986, **21.2**) showed that Spanish language students received more instruction in their native language and were more likely to be using native language materials than other language students (67 percent of Spanish language students in grade 1 and 58 percent in grade 2). However, for other groups, there may be very little or no use of the native language or native language materials. For example, Rudes et al. (1988, **30.1**) showed that Native American first and third grade students received a relatively large amount of their instruction in English, with little native language or language arts instruction.

Several studies have also shown that students in lower grades are more likely to receive native language support. The results of the Children's English and Services Study (O'Malley, 1982, **6.0**) indicated that over one-half (54%) of LEP students in grades K through 3 received bilingual instruction compared with 17% of LEP students in grades 7-9. A descriptive study of instructional services conducted in the Pacific Islands during 1983-1984 demonstrated that teachers commonly use the vernacular (i.e., native language) for instruction through grade 5, with English given a greater emphasis in upper grades (Freese and Woltag, 1984, **15.0**). Other authors (Cardenas et al., 1983, **10.2**; Young et al., 1984, **21.1**; 1986, **21.2**) also noted a tendency for native language use to decline in later grades.

Effective programs provide LEP students with adequate content area instruction. In addition to providing LEP students with language instruction, programs must also provide LEP students access to the content area curriculum. The emphasis on oral English proficiency typical of most special services for LEP students may mean that these students do not receive the same amount of academic instruction as the mainstream students. LEP students may attend only self-contained classes that teach English language arts to the exclusion of other subject areas. Conversely, other programs emphasize English reading and writing skills, followed by oral skills, but neglect the content areas to some extent (Cardenas et al., 1983, **10.2**). One component of the Significant Bilingual Instructional Features Study (Fisher et al., 1981, **18.1**) was to describe the allocation of instructional time in successful instructional settings, including 58 classrooms at six national sites serving LEP students from six ethnolinguistic backgrounds. Across the sites there was a strong emphasis on reading and language arts with instruction in these subjects accounting for over one-half of the typical school day.

In addition to the question of whether LEP students receive an equivalent amount of instruction in the content area is the issue of the level of instruction provided in the content area instruction that is received, and the level of student achievement in

the content areas. Cardenas et al. (1983, 10.2) describing classroom instructional characteristics of a representative sample of projects funded under ESEA Title VII Bilingual Education programs, reported that although LEP students at lower grade levels were usually at age-appropriate levels, LEP students at higher grade levels (i.e., fifth and sixth) were receiving instruction two or more grade levels below that of their peers. Similarly, a longitudinal study (1978-1984) on the teaching of reading to bilingual students from low-income families in Texas (Mace-Matluck et al., 1984, 13.1-13.7) found that the reading comprehension of low-income bilingual students, as measured by standardized tests (e.g., CTBS), was slightly below grade level upon entry into first grade and by the fourth grade, these students were one full grade level behind.

ESL and sheltered classes offer another means for providing content or academic classes, using simplified English and other LEP strategies; however, the level of content coverage provided and the relation of these to the regular classroom content is still an issue. None of the studies included in this review focused on this issue of the coordination between the curriculum for LEP students and the mainstream curriculum in terms of content coverage and level of content instruction.

Effective instruction utilizes the students' home and community background. The degree to which the cultural heritage of the students is incorporated into the classroom instruction has also been associated with student achievement (Mace-Matluck et al., 1984, 13.4; Rivera and Zehler, 1990, 39.7). For example, in a survey of Title IV, Part A programs serving Native American students, cultural instruction or activities components were found to contribute to increased knowledge of, and pride in, Native American culture and heritage, as well as increased skill in native culture creative arts and crafts (Reimer et al., 1983, 9.2). This same study found that nearly one-half of the teachers who participated in the cultural activities component of Part A programs during 1981-82 revised their curricula to better reflect Indian history and cultural heritage.

Because language is an important aspect of the home and community background of LEP students, there is a link between the use of the home language in the school and parent participation. Parent participation in school activities and goals has been widely acknowledged in recent years as a factor that promotes student success. Young et al., (1984, 21.1; 1986, 21.2), in reporting on findings of the descriptive phase of the National Longitudinal Study, found that the participation of language minority parents in school activities increased when they were part of the predominant language group. Schools where Spanish was the primary language were more likely to have parental involvement than schools where other languages dominated. Evidence from late-exit programs also suggests that using the home language for instruction facilitates parent participation (Ramirez et al., 1991, 38.4; 38.2). Moll et al., (1990, 39.5, 39.6) provide a model for incorporating the "funds of knowledge" that exist within students' homes and communities as a means of increasing the relevance of what is taught to knowledge students bring into the classroom. This approach promotes more active student engagement and increases student learning by building

from strengths and resources that exist within the students' experience and backgrounds.

Effective programs give students adequate time in special services. Ramirez et al. (1991, 38.4) found that structured immersion programs and early-exit bilingual programs both tended to keep LEP students in their respective programs for at least five years, despite the philosophy of these programs to mainstream students as soon as possible. This suggests that LEP students may need, on the average, at least five years of special services. In order to fully participate in academic instruction in English, students must develop "cognitive-academic" proficiency (Cummins, 1980) in English; this requires more time in special services, depending on the student's initial level of English and pace of acquisition. If a student is placed in regular instruction in English before his/her English language skills fully support this, then the student will be at a disadvantage in developing academic skills.

Effective instruction creates an active learning environment. In the longitudinal study comparing the effects of structured immersion, early-exit bilingual and late-exit bilingual programs, Ramirez et al. (1991, 38.2; 38.3; 38.4) noted that, across the three program types, there was a tendency for LEP students to be in a passive language learning environment, which limited the students' opportunities to develop complex language and thinking skills. Although teachers were encouraging and positive in their dealings with students, activities tended to be teacher-directed, with little opportunity for students to use language creatively. Student speech generally consisted of recall of specific information in response to low-level questions posed by the teachers. Opportunities for meaningful expression of ideas and substantive interaction in the language were generally not observed. Similarly, Fisher et al. (1981, 18.1) found that in the majority of the 58 classrooms under study, the students worked independently 90% of the day.

In contrast, innovative program models demonstrated within the Innovative Approaches Research Project (Rivera and Zehler, 1990, 39.7) showed that students could become involved in more complex discourse; for example, they could learn to think and talk about science as scientists do (Warren et al., 1990, 39.3). In the process they learned language, scientific discourse, and scientific reasoning and concepts. As a different type of example, the Partners for Valued Youth model (Robledo et al., 1990, 39.1, 39.2) placed minority students who were considered at-risk for dropping out in the role of tutors to younger students. Through this active involvement in the instruction of others, the tutors gained in self-esteem, showed lower drop-out rates, higher attendance rates, increased achievement, and developed new goals that included further education. The findings of the IARP models suggested that effective models for LEP students reach out beyond the classroom and involve others in the school, as well as involving greater linkages and cooperation among teachers working directly with the LEP students.

Means and Knapp (1991, 30) edited a volume of six papers that outline successful models in teaching advanced reading, writing, and mathematics skills to students at

risk of school failure. Although not focused on language minority LEP students, the discussion of the models include several references to linguistically and culturally diverse students and their needs, and the models are appropriate ones to consider for LEP students. The underlying principle of each model was to incorporate the prior knowledge, skills, and abilities of each students into the overall school curriculum by focussing on complex, meaningful problems, embedding basic skills instruction into the context of global tasks, and making connections with the students' out-of-school experiences and culture. One of the recommended strategies for teachers was to explicitly and repeatedly model the intellectual processes they are trying to instill in their students, such as the division of complex tasks into smaller parts and the use of multiple approaches to problem solving.

Constraints on implementation

An important issue in instruction of LEP students is why, having identified so many ideas about effective instruction, these are not implemented more often. What are the constraints that limit implementation? One study addresses this question (Chamot and Stewner-Manzanares, 1985, 20.0). The authors suggest that new approaches are not assimilated because they do not meet the needs of either students or teachers. For example, mixed language classes generally preclude the use of the native language. The culture of the students may prevent them from accepting new, less formal, practices as "real" learning. Teachers, too, may want greater structure and more control.

As Rueda and Garcia (1992, 56.0) point out, the beliefs of those who are expected to implement new approaches are critical to successful implementation. If teachers believe in a need for greater control in the classroom, then the use of student-inquiry approaches will not be implemented successfully. Based on this argument, the beliefs of students – and even parents – about the appropriate structure of class activities and the roles of students and teachers will have implications for how successfully new models can be put into place. Recognizing the importance of beliefs and attitudes and discovering ways in which conflicts between new approaches and existing belief systems can be resolved will be important to successful implementation and maintenance of a new model.

Birman and Ginsburg (1981, 5.0) identify other constraints. They point out that there are limitations to what a school district can reasonably provide to the students under their care. Although the philosophical underpinnings of an instructional approach provide the initial basis for program development, the services provided may be more a matter of resources than philosophy. For example, Chamot and Stewner-Manzanares (1985, 20.0) suggested that bilingual programs are frequently chosen for districts with linguistically homogeneous students while ESL programs may better suit less homogeneous populations. Where language diversity is high and qualified staff are limited, bilingual instruction may not be a viable option. The Cardenas study (1983, 10.1) had comparable conclusions.

Similarly, Carpenter-Huffman and Samulon (1981, 2.0), from information collected through structured interviews at six Local Education Agencies in the Western U.S., found that bilingual instruction was only offered at the secondary level when staff were available and willing to teach such a class. The availability of funds was an additional factor in the provision of bilingual services. Small, rural districts were more constrained by funding.

Chamot and Stewner-Manzanares (1985, 20) also point out that at times an instructional approach is used because resources are available for the teacher. For example, the audiolingual methodology is sometimes used because it is supported by extensive instructional materials and requires little time and effort on the part of teachers, although research suggests more active instructional activities would be more effective.

Materials Development

The instructional materials used in the instruction of LEP students have important implications for the coherence of instruction, providing an explicit link to the mainstream curriculum. The transition between special programs and the mainstream curriculum may be facilitated by the use of coordinated materials.

A synthesis of literature on ESL and analysis of educational policy issues by Chamot and Stewner-Manzanares (1985, 20.0) discussed what instructional materials are appropriate with various ESL approaches. The authors noted that, while current materials incorporate some newer ideas, they tend to retain audiolingual methods or communicative approaches. In addition, many materials have not been specifically developed for U.S. school-aged LEP populations; thus, few meet the cognitive or academic needs of these students. Frequently, commercially-produced materials are eschewed in favor of materials developed by individual teachers (Elford and Woodford, 1982, 8.0; Freese and Woltag, 1984, 15.0; Chamot and Stewner-Manzanares, 1985, 20.0; Atlantic Resources, 1992, 50.0). The eclectic mixture that results substantially influences the services provided.

Lack of knowledge of the mainstream cultural experiences inhibits students with limited English proficiency from obtaining adequate benefit from mainstream materials. Materials that would best meet the needs of U.S. LEP students would consider several factors, including linguistic and cultural characteristics, as well as academic and personal needs (Chamot and Stewner-Manzanares, 1985, 20.0). Nevertheless, in many classrooms, the cultural aspect is incorporated imperfectly or not at all.

Young et al. (1986, 21.2) in the National Longitudinal Study found that for about three-fourths of the students at grade 1 and about 90 percent at grade 3, teachers used materials that were either the same as those used by English proficient students or native language versions. Rudes et al. (1988, 30.1), reporting specifically on Native

American LEP students, stated that only about 11 percent of the teachers of first graders and 17 percent of third-grade teachers used Indian language materials in their classrooms.

Teachers have indicated that no differences existed between limited English proficient and non-limited English proficient students in their use of instructional equipment (Carpenter-Huffman and Samulon, 1981, 2.0). Nevertheless, a study of the use of new technologies within a sample of nine bilingual programs funded by the Department of Education (Comsis, 1984, 16.0) found that video and computer technology can have a significant positive effect on limited English proficient students. Television and video can enhance the resources available to geographically dispersed students. Computers allow students with different learning strategies to learn at their own pace. Some of the problems associated with the new technologies included the potentially high cost, a lack of qualified staff, and the frequent failure to emphasize effective planning and evaluation of how such technologies best support instructional objectives. Programs based on student need, rather than the availability of funds or other external impetuses, have the best chance for success. Innovative technologies will also have a better chance if there is support from the administrative and teaching staff, parents, and students.

Finally, although more recent research emphasizes the importance of "active learning environments" for students, there is no research that addresses the implications of this approach for materials use and types of resources needed for their implementation. However, providing guidance to teachers and students in the types of resources to use, in the ways in which to identify local resources, and how to organize and utilize locally developed resources, will be very important if this approach is to become successfully implemented.

C. Findings Specific to Asian/Pacific American Students

Three studies had findings specific to the instruction of APA students. A study conducted in the Pacific Islands during 1983-1984 showed that the unique economic, geographic, linguistic and political features of the United States Pacific islands are reflected in the diversity of educational policies. Substantial variation exists among Island schools in the amount of overall instruction offered, the types of materials and resources available and other features. Although the numerous language groups preclude extensive use of a bilingual approach, teachers typically use the native language for instruction in the elementary grades. Scarce resources influenced the services available. Commercially developed materials were so frequently out-of-date and inappropriate for the level of the students that teachers had to create their own locally produced materials (Freese and Woltag, 1984, 15.0).

Young et al. (1986, 21.2) found that Chinese language students in first and third grades received more regular instruction in English, but less special English instruction than Spanish language speakers. They also received less academic instruction, in general, than other language speakers and their teachers were less likely to have taken college course related to language minority LEP students. The

home backgrounds of Chinese language students also varied. They were less likely to use English in the home and to discuss school events with their parents. The Descriptive Phase report of the same study (1984, 21.1) reported a relationship between language groups and instructional service type. The majority of the findings, however, related to the numbers of students rather than to the instructional service.

D. Summary

The instructional findings reviewed represent a considerable range in terms of the nature and scope of studies, and their objectives. The large national studies were conducted to examine the range of services provided to students and to compare the effectiveness of services provided. The National Longitudinal Evaluation of Services for Limited English Proficient Students provided a rich database about the instructional services being provided, the staff providing these services, and the students served. The Immersion Study provided comparative data in their examination of three types of programs that, overall, showed that students could progress in all three programs, with some differences in achievement suggested for longer programs of special services that incorporate use of the native language.
The outcomes of different types of instructional services program services were the focus of several studies, with outcomes defined in terms of academic achievement and increase in English language skills. In several studies, the use of the students' native language for instruction was associated with positive outcomes in academic areas and in English language skills as well. However, outcomes of programs were not only in the area of academic achievement. Other outcomes were also found. For example, some studies noted that the level of parental involvement and individual self-esteem were affected by implementation of a particular program.

At least six studies advocated innovative approaches with the emphasis on cooperative, student-centered learning and the acquisition of higher-order thinking skills. Nevertheless, despite a potentially strong connection between innovative practices and innovative materials, studies discussing material and resource development were uncommon.

Only two studies reported on LEP instruction in private schools. The Choy et al. summary of survey results (1992, 54.0) indicated that only a small percentage of private schools provide services to LEP students. Elford and Woodford, 1982, 8.0) suggested that private schools, despite their lack of constraints on instructional approaches and materials, have not shown a greater propensity toward innovative or effective practices. Taken together, these findings suggest the need for further research into the number LEP students who attend nonpublic schools, the services they receive and the effects of those services.

Few studies focussed on secondary LEP students. Yet, these students may require instruction completely different from that provided to the elementary-level LEP student. For instance, some populations of secondary-level LEP students (i.e., those

who are illiterate or semi-literate in their own language), require substantial transition before they are mainstreamed. At the secondary level, they have fewer years to catch up to their non-LEP peers.

In some districts, newcomer centers or self-contained classes address the needs of recent immigrants who are below grade level. One possible area of further research is to describe the characteristics and demonstrate the effectiveness of these centers and special classes for secondary-level LEP students. In addition, recent findings suggest that the percentage of language minority LEP students served by any of these special programs tends to decline in the upper grades (Puma, 1993, 58.2). The reasons for this decline are not clear. It may be due to a lack of resources at this level, a belief that students at this level are sufficiently proficient and therefore do not require special instruction, or something else. The extent to which the needs and services of language minority LEP students in middle and high schools differ from those of the elementary school is an important research issue.

For many LEP students, instruction takes place not only in an ESL or bilingual education classroom, but also within regular classroom settings. None of the studies included in this review focused on the type of instruction received by LEP students within regular classrooms, with the exception of the National Longitudinal Study which did obtain information from all teachers who had LEP students in their classes. Still we do not know much about strategies of mainstream teachers who instruct LEP students, or about their belief systems with regard to instruction of LEP students. The research here suggests that this will be important to examine.

VI. ADMINISTRATIVE FINDINGS

A. Overview

The administration of special services for LEP students involves federal, state, and local education personnel in ensuring the development, implementation, operation, and evaluation of the services and programs. The administrative nature of a program affects the ways in which services are delivered. The three sections of this chapter contain findings related to the administration of special services for LEP students. Many of the findings have been taken from studies focusing specifically on administrative level components while other findings have been reported from sections of studies with a much broader focus. The first section reviews the findings on federally funded studies supplied for this report, including funding for LEP services, the administrative structure of services, entry/exit assessment procedures, and reporting requirements and program evaluation. The second section looks specifically at findings directed toward the Asian/Pacific American population. The final section provides an overall summary of administrative findings and proposes additional research topics.

B. Review of Findings

Funding for LEP Services

Title VII funds have provided financial resources for developing and implementing special services for language minority, limited English proficient students for 25 years. In addition to Title VII funds, other federal, state, and local resources have assisted in the development of services for LEP students. Many of the federally funded studies provided for this review have investigated program financing, including the following issues: the amount of money provided, required, and actually used for services; and the differences that exist regarding costs for various program models, students, or geographic locations. Funds have been used to meet many program expenses, including administration, staff, and supplies.

Sources of Funding

A number of federally-, state-, and locally funded programs provide resources for both instructional and non-instructional activities (e.g. counseling, career education, health, drug abuse education, nutrition, transportation) for LEP students (Zehler, 1991, 43.0).

Federal Sources. Federal funds are used extensively to provide services to LEP students. Carpenter-Huffman and Samulon (1981, 2.0), in a study focused on the added cost of instructional personnel, looked at the sources of funding for services (primarily bilingual programs) for LEP students. They found that these programs were frequently funded by Title VII, Title I-Migrant, and Title XIII-C (Indochinese).

Federal programs administered by OBEMLA and funded through Title VII Part A Programs focus on instructional services for LEP students. These include Transitional Bilingual Education, Developmental Bilingual Education, Special Alternative Instructional Programs, Special Populations Programs, Family English Literacy Programs, and Academic Excellence Programs. Training for teachers of LEP students is provided through programs funded through Title VII Part C Programs.

LEP students are also served through programs that are supported by federal funds to Local Educational Agencies (LEAs) and State Educational Agencies (SEAs) for services for disadvantaged students, such as Chapter 1 Compensatory Education Programs and Chapter 1 Migrant Education Programs. Funds for educational and related services for Native American students (many of whom are LEP) are provided directly to LEAs, SEAs, and other organizations/institutions. LEP students are also served by funds authorized through the Individuals with Disabilities Education Act and by Project Head Start (Zehler, 1991, **43.0**).

In some cases, federal funds are the primary source of support for the provision of special services for LEP students. In all cases, however, a primary concern regardless of source of funding involves the number of students. Rudes et al. (1988, **30.1**) noted that the number of students eligible for, in need of, or receiving services may affect funding. Findings indicated that the average amount spent per student decreased as the number of students served increased. Freese and Woltag (1984, **15.0**) reached similar conclusions from data gathered through interviews and document analysis in a study of instructional services for LEP students focused on the U.S. Pacific Islands. Findings indicated that most of the Pacific Islands have a very limited tax base and, therefore, the school systems do not have the financial resources to support special programs. In addition, the small population and fixed costs regardless of the size of the population greatly impact the provision of services.

State and Local Sources. Many states also provide special funds for bilingual education programs apart from federal sources (Zehler, 1991, **43.0**). In a study carried out on capacity-building efforts in Title VII, Kim and Lucas (1991, **47.1**) reported that approximately 40 percent of states provided funds that were specifically designated for instructional services for LEP students.

In the reports reviewed for the period 1980-1993, findings indicate that state and local funding provided a greater percentage of funds than federal funds. In addition, the median percentage of state funding increased much more than federal funding, which actually decreased. Kim and Lucas (1991, **47.1**) reported on the amount of funds expended at the district and federal level. Findings showed that the median percentage of district funds of the total expenditures for LEP instructional programs increased from 51% in 1985-86 to 64% in 1990-91. The median percentage of Title VII funds decreased from 10% in 1985-86 to 6% in 1990-91.

Studies of funding within Chapter 1 are also relevant to LEP students since many LEP students are eligible for compensatory education (although not all districts

provide Chapter 1 to students identified as LEP). Sinclair and Gutmann (1991, 42.0) reported that funding increased 11 percent from over $3.4 billion in 1987-88 to a 1988-89 total of $3.8 billion. Allocations ranged from $4.9 million in Wyoming to almost $400 million in New York, reflecting overall increased allocations from 1987-88 to 1988-89. The average allocation per Chapter 1 participant increased by nine percent from $696 per participant in 1987-88 to $756 per participant in 1988-89. Individual allocations, however, differed substantially, ranging from $419 in California to $1,673 in the Bureau of Indian Affairs. States which had high Chapter 1 allocations per participant also indicated high per pupil expenditures. Twenty-four states reported receiving concentration grants, or funds designed to augment basic grants in LEAs with very high concentrations of children from low income families (Sinclair & Gutmann, 1991, 42.0).

Tikunoff et al. (1991, 46.2), in a recent examination of the funding histories of nine sites selected as case studies for the Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs, found a mix of funding sources. Five projects were being partially funded by Title VII at the time of the study. Eight projects were being supported by state and local funding, and one project was funded by special state funding. Two projects received federal funding other than Title VII, and two projects were being collaboratively funded by two or more agencies or sources. For example, one project was funded by a community college and local school district, while the other project received funding from a variety of sources (Title VII, Chapter 1, district funds, competitive awards to teachers).

Use of Funds

Federal, state, and local funds directed toward special services for LEP students may be used for a variety of program components, excluding portions of funds or entire grants which carry specific restrictions.

Instruction. Findings from the federally funded studies indicated that funds most often supported instructional services. Carpenter-Huffman and Samulon (1981, 2.0), in discussing the delivery and cost of bilingual education, examined the uses of funds. Funds from categorical programs were used for payment for additional teachers, paraprofessionals, staff development, materials and equipment, parent involvement, administration, and support functions (i.e., evaluation and administration). Teachers in self-contained classrooms were not paid from categorical funds since they do not provide supplemental services to LEPs, i.e., services which are in addition to the LEP students' regular schedule.

Among the studies reviewed, the more recent ones showed the same patterns in the use of funding from categorical programs as was found in the Carpenter-Huffman and Samulon (1981) study. Funds were reportedly utilized for instructional services. Kim and Lucas (1991, 47.1), in a study on capacity-building among Title VII

programs, identified patterns in the usage of Title VII funds. In starting or expanding programs, Title VII funds were most often used for staff training and inservice and parent training. Other uses of funds included collection/purchase of LEP instructional materials, assessment and placement of LEP students, classroom aides/tutors, support of project director/ coordinator positions, resource staff, inservice programs for staff, and parent training. In addition, 90 percent of the projects used Title VII funds for developing community/parent support through activities such as parent conferences, home visits, and presentations at meetings or conferences. Fifty percent of the projects published articles, brochures, or newsletters.

The Year One Report of the Instructional Services for Native American Students with Limited English Proficiency (Rudes et al., 1988, 30.1) also noted that instructional services were the most frequently funded special service. For the Native American elementary LEP students in the 56 Title VII-funded projects, the most frequent service provided through Title VII funds was bilingual aides or classroom translators (51%). The next most frequent service (47%) was the development or acquisition of materials pertaining to instruction in the local Native American language and in English. Other services provided to the Native American students included community and parent development (32%), cultural heritage instruction (27%), staff development (25%), computer assisted instruction (25%), tutorials in content subjects (13%), home/school liaison (11%), English-speaking only ESL aides (7%), Native American language arts teachers (5%), English language arts teachers (2%), ESL instruction for parents (2%), and language laboratories (2%).

Personnel training. The preceding discussion has focused on the use of funds within programs that support instructional services, i.e., Title VII Part A programs. However, the question of the use of funds is also relevant to programs that prepare instructional and administrative staff for working with LEP students, such as the Title VII Part C programs. Only one of the studies included in this review, An Evaluation of Educational Personnel Training Programs by Riccobono et al. (1992, 51.0), included data on the use of funds within training programs. In examining all Bilingual Education Personnel Training Programs receiving Title VII funds in 1990-91, findings indicated that an average of 65% of grant funds were spent on participant aid, including stipends, books, travel expenses, and tuition and fees. An additional 25% was spent on administrator, staff, and faculty salaries and benefits, and an average of 10% covered costs such as program evaluation, materials and supplies, equipment, travel, and overhead. Participants in the program included both preservice and inservice teachers.

Capacity-building. Title VII funds are also used for assisting local education agencies in developing an improved capacity for serving limited English proficient students. Capacity-building refers to those activities which programs undertake to generate funding sources and to sustain LEP services without Title VII funding, or to provide staff training and development opportunities or purchase materials. Four studies specifically addressed capacity-building efforts, reviewing factors affecting

successful capacity-building and sources and uses of outside funding for continuing projects.

The Alternative Inservice Staff Development Approaches (AISDA) study (Arawak, 1986, 22.3) focused on the training of staff serving minority language/LEP students at LEAs with Title VII funds. The study revealed that Title VII funds play a major role in building districts' capacity to serve minority language/LEP students and that inservice training is an essential factor in developing local capacity. It was recommended that OBEMLA encourage capacity building through inservice training by requiring applicants to commit funds or in-kind matching contributions for staff development . A second study (Cardenas et al., 1983, 132) noted only partial success in terms of institutionalization of the bilingual education programs supported through Title VII.

The National Survey of Title VII Bilingual Education Capacity Building Efforts (Kim & Lucas, 1991, 47.1) surveyed Title VII project directors, school district superintendents, principals, and SEA directors of bilingual education programs to determine the capacity building impact of Title VII grants. The conditions most frequently mentioned by all groups as contributing to the success of capacity building efforts were commitment and support by the school board and/or the superintendent, and staff development and training. Approximately 53 percent of the projects provided between one and 40 hours of training to their Title VII staff. Forty-three percent provided more than 40 hours of staff training. The condition most frequently mentioned as hindering capacity building was inadequate funds or lack of resources, as well as the lack of qualified staff and teacher/staff turnover.

The three types of services that were most often continued with district funds after Title VII grant funds were no longer received were the collection/purchase of LEP instructional materials (68%), assessment and placement of LEP students (64%), and services of classroom aides or tutors (62%). Project director or coordinator positions, resource staff, inservice programs for staff, and parent training were most often dropped when Title VII funding stopped. Staff hired with Title VII funds included administrators (80%), resource teachers (90%), aides (90%), and community liaisons (43%). The retention rates of these staff with district funds was highest for aides (76%) and lowest for community liaisons (55%). About 70% of the projects began the process of developing and purchasing instructional materials for their LEP students with Title VII funds (Kim and Lucas, 1991, 47.1).

School type. The Federal sources of funding for LEP instructional services were reportedly utilized more by public schools than by private schools. Elford and Woodford (1982, 8.0) looked at federal funding in general at nonpublic schools and examined innovative bilingual education practices. They found that bilingual education services of the type offered in most public schools are not available in most private schools. Nonpublic schools have limited involvement with Title VII, and most of their aid is from (old) Title I and Title IV (library) sources. Usually, bilingual

education programs are a feature of specialized schools rather than typical of all full-time private schools and are administered in conjunction with local school districts.

In this study, some private school educators noted that they are reluctant to depend on government assistance to support activities such as bilingual education, in case it is withdrawn. In addition, administrators and parents were uncertain about the effectiveness of bilingual education programs for English language learning.

Costs of Services

The studies reviewed show that it is difficult to calculate the costs of special services to LEP students. The special services reflect a diversity of programs suited to meet students' needs, and the costs associated with these programs may be equally diverse. The range and variety of factors utilized in deriving the costs add to the difficulty of such calculations. No formula is consistently applied for determining the costs of services to LEP students.

Calculating costs. Carpenter-Huffman and Samulon (1981, 2.0) noted that, in the past, the procedure for measuring the added cost of bilingual programs was the cost of the added resources divided by the numbers of LEP students. However, they indicate that this measure does not adequately estimate the cost of services beyond the cost of educating the students without these services. They point out that the added cost is strongly related to procedures for service delivery, and that delivery procedures depend on local education agency policy, the numbers of LEP students, their primary languages, the availability of staff, and enrollment trends. They suggest there is a need for more information and research resources to establish the cost of bilingual programs nationwide.

Per pupil costs. In their study, Carpenter-Huffman and Samulon found that the cost of instruction in bilingual programs added from $100 to $500 to the per pupil cost. This cost included teacher salary, mode of instruction, and other staff and aides. (However, the study was not based on a nationally representative sample of the nation's bilingual programs and bonafide baseline data did not exist). Generally, pull-out classes were found to cost more than self-contained classrooms. The greatest costs overall were consumed by staff development and program administration while identification and assessment of LEP students and parental involvement activities added fewer costs.

Costs of services have also been discussed in terms of per pupil costs for implementing specific programs. Ten programs serving migrant students, many of whom are LEP, were among the 130 Chapter 1 programs nominated by SEAs as deserving special recognition for being highly successful in meeting the needs of disadvantaged students. Most of the ten programs serving migrant students reported per pupil costs from $500 to $999; one program reported costs of under $499 per

pupil, and another program reported spending over $1000 per pupil. The tenth program did not report per pupil cost (Alexander et al., 1987, 25.0).

Staff development costs. One element of LEP student services refers to the personnel serving the students and the opportunities they have for training and development. The types and number of opportunities, of course, depend on the cost of providing such opportunities. The Alternative Inservices Staff Development Approaches study (Arawak, 1986, 22.3) also concluded that funding and administrative decisions regarding staffing patterns constrained the inservice approach followed by LEAs. Providing on-staff personnel whose major responsibility is inservice training was found to be more costly than a workshop series delivered by consultants. The cost of a training package was found to be variable, depending on the number of topics treated and the depth of the training. Based on these findings, it was recommended that OBEMLA consider requiring first and second year applicants to allocate a specified minimum of their total grant requests to inservice staff development activities. It was further recommended that for the first two years of the project applicants be asked to commit specific in-kind matching contributions for staff development.

Overall, a variety of sources are used for funding special services for LEP students, including federal, state, and local sources. Use of funds may also be tied to the source of funding, i.e., Title VII grants for specific programs. Generally, funds are used to provide instructional services, The cost of services also varies. The difficulty in calculating costs of services parallels the diversity of funding sources and use of funds.

Administrative Structure of Services for LEP Students

In this section, findings related to administrative structure at the state, local, and school level are discussed. Administrative structure refers to the linkages among persons who manage and make policy decisions and who organize instructional programs for LEP students. The administrative structure also includes linkages between regular school services and special services for LEP students. Administrative structure at the SEA, LEA, and school levels can affect the nature and quality of special services for LEP students.

The coordination, collaboration, and communication among administrative units influences the overall effectiveness of the delivery of special services. Recent studies focus on the importance of an integrated structural system for LEP services. By integration, these studies generally refer to coordination of bilingual/ESL program administrators and instructors with the mainstream staff; communication throughout the entire school, district, community, or state; and coordination of LEP services with mainstream services.

SEA-level administrative structure. Linkages among different service providers/administrators at the state level can be an important component in defining effectiveness of instructional services. State education agencies (SEAs) are most often the liaison between federal and local administrative personnel.

The Descriptive Analysis of Title VII-Funded State Education Agency Activities, Volume II: (Nava et al., 1984, 14.0) described and analyzed SEA policies and activities (including state legislation as it related to federal legislation that addressed language minority LEP students), and the SEA-level management structures implemented as a result of Title VII grants. The study included a review of relevant literature, a review of SEA grant applications, and case-study site visits to nine SEAs. In the study, it was reported that most SEAs perceive their most effective activities to be the provision and coordination of technical assistance and services such as training workshops, assistance in preparing grant applications, conferences, and curriculum materials and publications. Several of the SEAs included successful passage of statewide LEP service mandates and teacher certification requirements in their achievements. Other SEAs mentioned that the need still exists for creating stronger certification requirements and for institutionalizing bilingual education by state mandate.

The SEAs also had a number of areas of concern. Most SEAs expressed the need to build awareness of LEP students' needs at both the state and local levels. They also mentioned the need to collaborate with other services and state offices and to integrate their activities with those of other state programs (Nava et al., 1984, 14.0). In fact, Strang and Carlson (1991, 40.0) found that overall coordination of Chapter 1 and language programs for LEP students is lacking at the state and local levels, resulting in many service delivery problems and inconsistencies. For example, in the case-study reports, Chapter 1 personnel were reportedly unaware of the data available on individual LEP students. The discovery of such problems lead to the recommendation that districts implement plans for coordination among special programs and for coordination between special programs and the regular education program, and that state offices assist districts in these efforts.

Nava et al. (1984, 14.0) reported that the responsibilities of SEAs to LEAs were not clearly defined. SEAs were concerned with their lack of authority to monitor Title VII LEA projects. Most SEAs said they wanted to be able to require LEAs to improve programs or implement programs in accordance with their Title VII applications, disapprove applications, and have Title VII funds distributed through SEAs. They felt that this would result in better programs. Nava et al. further pointed out that the relationship between the federal and state levels was also problematic. SEAs expressed dissatisfaction with the changes in the technical assistance service centers. Most SEAs mentioned a loss of flexibility resulting from the change from Bilingual Education Service Centers (BESCs) to Bilingual Education Multifunctional Service Centers (BEMSCs) and said that contractual constraints on the BEMSCs limited their ability to respond to LEA and SEA requests. Also, the SEAs would like to see an improvement in the level of communication with OBEMLA. They would like

OBEMLA to disseminate more information about other Title VII programs and research findings, provide feedback on their annual application, provide feedback on their overall performance, and provide more direct contact with SEA personnel. Most SEAs also felt that the financial support they received needed to be increased and believed that since SEA grants were distributed on a formula basis, they should not be required to submit yearly applications (Nava et al., 1984, 14.0).

The cooperation and coordination among administrative units are clearly essential for the effective organization and delivery of services. Conflicts within or between these entities potentially impact on the effective implementation of a program.

LEA-level administrative structure. The local level of administration typically rests with the school district, the local education agency (LEA). In most cases, the LEA serves as the link between the SEA and the individual schools within the school district. Two studies supplied for the literature review refer to local levels of administration. In each case, the coordination of LEP services with other special services (e.g. Chapter 1, Migrant Education Program) is discussed. However, there is no mention in these studies of the coordination of LEP services with the regular, mainstream curriculum.

The ways in which schools coordinate Chapter 1 and ESL/bilingual services were recently studied by Strang and Carlson (1991, 40.0). In examining procedures followed by local districts in serving LEP students in Chapter 1, they found that some districts implemented services sequentially and others simultaneously. The sequential approach stipulates that a LEP student must reach a certain level of English proficiency before being assessed for Chapter 1 service. Simultaneous services address the Chapter 1 needs of LEP students regardless of their level of English proficiency. In districts that used the sequential approach only some potentially eligible LEP students were served because, in some cases, the students' English skills were too low while in others their skills were too high to be eligible for instructional support once they reached the cut-off set for English fluency. In districts where simultaneous services were provided, LEP students eligible for Chapter 1 generally received the same services as English proficient students, but in their home language. It was also found that the ESL services totally or partially funded by Chapter 1 were not clearly supplemental to services funded by other sources. The investigators recommended that it be made clear to districts that Chapter 1 can provide English as a second language services, but that those services must clearly supplement the English as a second language services funded by other sources, rather than supplant them.

Strang and Carlson also examined the availability of language services for LEP students across grades and found that although these services were usually available in all grades, language and Chapter 1 services were often concentrated on students in the early primary grades. They recommended that local programs be coordinated so that students who exit LEP services and older recent immigrants with little formal

schooling will be eligible for supplementary language and compensatory education assistance (Strang and Carlson, 1991, 40.0).

School-level administrative structure. The type of administrative system operating within a school system may affect the degree to which various staff determine, participate in, and support the types of services offered to LEP students. In addition, their relationship to the LEA and SEA may greatly impact on the provision of special services. The organization and characteristics of successful, or effective, programs and services dominated the federally funded reports reviewed regarding the school-level administrative structure. Two studies, though, reported on the effects of involvement of administrative personnel. A large number of the research reports are based on case studies, thus limiting the generalizability of findings; however, they present a rich and vivid portrait of what is really happening in programs which are considered effective.

Effective Characteristics. Tikunoff et al. (1991, 46.2) studied the significant features of nine exemplary Special Alternative Instructional Programs (SAIPs). The form an exemplary SAIP took and the nature of its success built upon, and was influenced by, contextual features. These included programmatic response to significant increases in ethnolinguistically diverse student populations and the prior history of programs for LEP students. The leadership for planning, coordinating, and administering the program played a major role in the effectiveness of the SAIPs.

It was further found that implementing exemplary SAIPs required reallocation of administrative resources. In some cases, entire schools or school districts made commitments to reallocate resources for SAIP implementation. Housing arrangments for LEP programs and services were rearranged and reflected a variety of ways of implementing the services. For example, schools with large populations maintained self-contained departments while several schools serving LEP students established district education centers. Educational experiences were also extended beyond school hours to include tutoring, internships, and visual/performing arts. In addition, external funds were identified to combine with district funds for program support.

Tikunoff et al. (1991, 46.3) carried out case studies of a variety of programs in a study of Exemplary Special Alternative Instructional Programs. Many features distinguished these programs. Coordination with the mainstream program and with other special services included sharing resources and training mainstream teachers in strategies for integrating LEP students into their classes. Programs which exercised flexibility in the placement of LEP students and which targeted long term staff development and teacher input in program design and implementation were also successful. The content areas and English language learning were integrated, and overall, staff maintained high expectations of students.

The Effective Compensatory Education Sourcebook, Volume III: Project Profiles (Alexander et al., 1987, 25.0) presented descriptions of 130 Chapter 1 programs selected for recognition in 1985-86 for being highly successful in meeting the special needs of disadvantaged students. Out of the 130 programs profiled, ten were migrant programs. Administrative or policy functions associated with successful programs reflected coordination with the regular school program and other special programs, parent/community involvement, and professional development.

Effective aspects of other federally funded programs were also reviewed. Rudes and Willette (1989, 35.1) developed a handbook describing effective migrant education practices and noted that effective practices included communication across school and project administrators and adequate facilities. In summarizing the results of their case studies (1990, 35.2), Rudes and Willette emphasized the importance of coordination of services between regular and summer programs, between the sending and receiving schools, and between the migrant program and other agencies serving migrants. They noted the need for thorough outreach and recruitment efforts, and pointed out that the effective practices are not unique but are shared with other compensatory programs.

adequate staff development and training were also characteristics of effective programs. An investigation of effective inservice practices used by LEAs experienced in conducting Title VII programs (Arawak Consulting Corporation, 1986, 22.3) identified three distinct approaches to planning inservice sessions: administrator centered (unilateral administrator decisions), advisory centered (administrator decisions with program staff members' advice), and collaborative (administrator and staff team effort to planning).

It therefore appears to be that the collaboration, coordination, and communication among staff and services play important roles in the effectiveness of the delivery of services to LEP students. What many studies fail to point out, though, is exactly how the effective programs, or program components, can be implemented. In other words, it is easy to learn "what" to do but much more difficult to learn "how" to implement such factors into the individual programs and other contexts.

Communication, collaboration, and coordination were evident in the four research and demonstration models implemented through the Innovative Approaches Research Project (IARP) (Rivera and Zehler, 1990, 39.7). By fostering communication and collaboration among staff, programs, classrooms, and schools also created a restructuring of relationships among people and programs in the schools. This change, beyond the instructional implications of the models, led to significant modifications in the classroom and to a transformation in students' attitudes and performance.

Administrative involvement. School level variables which may have an impact on the academic achievement of language minority-LEP students were identified by the Year One Report of the National Longitudinal Evaluation for the Effectiveness of Services for Language Minority/LEP Students (Young et al., 1986, 21.2). The principals' involvement in school affairs led to greater interactions with teachers and greater influence on instructional practices. Preliminary examination of variables as well as literature reviews suggested that the percentage of language minority-LEP students in the school's total enrollment, the language used outside the classroom, the extensiveness of principal's interactions with teachers, and the nature of exit criteria from special services may be the most significant variables.

Entry/Exit and Assessment Procedures

Students must be appropriately identified as limited English proficient for placement into LEP student services. Thus, a great need exists for information on the most effective measurement approaches and techniques. The variety of definitions used for identifying LEP students, as noted in Chapter II, increases the importance of examining the language(s) in which language ability is measured and of exploring the means of assessing language proficiency. The use of diverse definitions affects the selection procedures that are employed by a state, district, or school for choosing which students receive special language-related services. Entry and exit criteria may also be interpreted differently by schools within a district or by districts within a state.

Focus of assessment. In the assessment of language proficiency for placement or exit from special language-related services, the emphasis of the assessment may vary. For example, the measurement may focus on all language skills or focus specifically on one skill, such as speaking or reading proficiency. In addition, language skills in the native language and/or English may be assessed. Results of a 1978 educational needs assessment for language minority children with limited English proficiency (O'Malley, 1982, 6.0) indicated that LEAs' assessment of language proficiency was generally restricted to skills in English. Another study reported similiar findings—language proficiency is usually restricted to oral English language skills with little emphasis on primary language skills (Carpenter-Huffman and Samulon, 1981, 2.0). This is supported by O'Malley, (1982, 6.0) who also reported that most schools did not assess the students' capabilities to perform in a non-English instructional medium.

O'Malley's study also compared the results of using LEA guidelines for identification of LEP students with the use of an English language proficiency test. He found that LEAs identified fewer LEP students among the total language minority population than were identified by the English proficiency assessment tool administered in the study. That is, schools designated as LEP only 24% of those identified by the assessment test as slightly limited to severely limited, thus lowering the overall

percentage of LEP students being adequately served. Although these data seem to suggest that the LEAs' identification criteria are less stringent than the criteria applied in O'Malley's study, O'Malley cautioned that the high percentage of non-response (42%) on the test administered in the study renders this conclusion tentative.

Warren et al. (1991, 39.3, 39.4) described the alternative forms of assessment they used in their examination of student's growth in scientific understanding. For the student inquiry process involved in the Cheche Konnen model, standardized assessments would not have captured the growth in knowledge of the students. With new approaches to instruction, forms of assessment that are appropriate to the learning activities in the classroom must be used; the use of alternative assessment methods with language minority LEP students is an important area that requires further examination.

Methods of Assessment. Findings from the federally funded studies showed that states and districts employ a variety of methods for identifying LEP students. In addition, the focus of assessment influences the methods and techniques used for determining language proficiency and for placing students into the appropriate services. The most frequently used are tests to assess language proficiency and home language surveys. Additionally, subtests of standardized achievement tests, observations or interviews with students, and referrals/evaluations by teachers or other personnel are used to identify LEP students (Zehler, 1991, 43.0). Kim and Lucas (1991, 47.1) found that the most frequently used criteria for entry to the LEP programs included home language surveys (88%), oral English tests (84%), and parental permission (78%). The most frequently used exit criteria were English reading/writing tests (83%), oral English tests (69%), teacher judgement (68%), and parental permission (66%) (Kim and Lucas, 1991, 47.1).

According to a synthesis of research on language proficiency assessment (Pelavin Associates, 1985, 19.0), standardized measures were tests of language proficiency most commonly used in bilingual programs. These measures concentrate on assessing oral language ability and assessing structural components of language such as grammatical forms, syntactic structures, and vocabulary. Research also indicates that different tests identify different percentages of the same LEP populations, that some of the tests reversed the rank order of language proficiency classifications, and that language proficiency tests and achievement test scores were not highly correlated.

Broader definitions of language proficiency are reflected in instruments and procedures which go beyond the assessment of language structure to assess the ability to use language, as Pelavin Associates (1985, 19.0) pointed out in their discussion of communicative competence. Communicative competence assessment procedures were found to measure a broader and more realistic range of students' academic language ability, yet further validation of these procedures should be conducted before they are adopted by school districts. In addition, the relationship

between language proficiency and academic achievement must be investigated further.

A number of innovative approaches to selection/reclassification procedures have been identified, including the Student Placement System, the Teacher Observation System, an entry-exit checklist, language free measures, and time on task measures (Crespo, 1985, **17.2**) and home language surveys or English and native language proficiency tests (Rudes, 1988, **30.1**). To classify Native American students as LEP, students were administered achievement tests, English proficiency tests, primary language proficiency tests, home language surveys, or a combination thereof. Teacher evaluation was used by itself or in conjunction with tests. The majority of children (90%) were classified as LEP in kindergarten. Most of the schools (72%) which followed a formal evaluation process began the identification process with a home language survey, then the students were tested. In these schools, students identified as LEP were reassessed at least once a year. When tests were used, the types of tests and cut-off scores varied (Rudes, 1988, **30.1**).

Crespo (1985, **17.2**) reviewed literature and other data relevant to program entry and exit procedures, collecting information from 20 SEAs. Even though there may be considerable variation in interpretation and implementation across districts, federal laws (e.g., regulations for programs of instruction eligible for financial assistance), court rulings, and state regulations influenced selection processes. The selection processes for services usually involve identification through a native language or home language survey; assessment of English language proficiency using a standardized test measuring proficiency in speaking, listening, reading, and writing; placement in an appropriate bilingual or monolingual program; periodic review of English proficiency; and transfer out of a bilingual program based on proficiency scores and teacher judgement. Standardized language proficiency tests were used for entry/exit decisions with greater frequency than other measures, although several studies questioned the reliability and validity of such tests.

Chapter 1 services entry criteria. A study of Chapter 1 services, as they relate to the LEP population and other special services for language minority LEP students, examined the procedures and criteria used to identify and select LEP students to be served by Chapter 1 (Strang and Carlson, 1991, **40.0**). Many school districts set English language prerequisites for eligibility in Chapter 1 basic skills, and English oral language proficiency tests were the most frequent measure used for selection of LEP students. Standardized achievement tests in English or Spanish were used in some districts to determine LEP eligibility. In these districts, teacher judgments were used for selection if primary language achievement tests were not available. Teachers also judged whether LEP students were capable of taking the English language achievement tests.

A comparison of selection procedures across districts indicated that program design decisions for Chapter 1 and for LEP services had the greatest effect on how LEP students were selected for Chapter 1 services. Chapter 1 selection procedures across

schools within districts appeared to be uniform. The authors recommended that English language achievement tests not be the only measure used for LEP selection. They suggested that districts select LEP students for Chapter 1 using a composite measure of student need that would include the student's educational history, test scores and informal assessments, and teacher judgment (Strang and Carlson, 1991, 40.0).

Overall, three findings repeatedly appear throughout all of the federally funded studies related to assessment procedures that are included in this review. First, a variety of criteria (e.g., tests, surveys, judgments) are used to determine eligibility for special language-related services. Second, specific criteria may not be employed consistently within a district or state. Additionally, English language skills, especially oral language skills, are most frequently assessed.

Reporting Requirements and Program Evaluation

An administrative function important to OBEMLA concerns reporting requirements and evaluation reports. The information supplied in the reports can have a great impact on future funding and program directives and therefore the quality, accuracy, and comprehensiveness of the data are of major concern.

Federal legislation stipulates that all grantees of federal funds comply with certain reporting requirements regarding the use of federal funds. All programs are held accountable for using the funds in the manner indicated in the grant application and for producing positive outcomes. Results of a draft interim analysis of Title VII SEA grant report requirements (Atlantic Resources Corporation, 1991, 45.0) found that the quality, comprehensiveness, and completeness of the data submitted to OBEMLA as part of reporting requirements are not uniform, and statutory and regulatory reporting requirements are vague and imprecise. The burden of providing complex information and the lack of personnel trained to identify and count LEP students resulted in the uneven quality of information and incomplete data. In addition, the study noted that definitions of LEP vary conceptually and operationally (as noted in the Student Findings chapter) with LEAs using different assessment tools, having different testing requirements, and reporting different test statistics which make it difficult to aggregate or compare information. Thus, the usefulness of the project evaluations submitted to OBEMLA is questionable.

SEAs expressed concerns with duplicative data collection requirements, citing that some data are available from other sources. The information most extensively used by OBEMLA included basic information on LEP students, such as total numbers, educational condition of students, numbers enrolled in specialized programs, and description of LEP programs. OBEMLA staff interviewed for the study also identified interest in other information which may be collected by SEAs, as well as its potential uses. SEAs and LEAs were seriously concerned with the burden of potential reporting beyond the existing reporting requirements and with the quality

of information currently collected. Recommendations resulting from the analysis of the SEA grant report requirements included that OBEMLA should (1) determine what data is needed and prepare definitions and instructions that reflect those requirements; (2) develop standard reporting forms and a common measure of educational condition; (3) collect private school data separately from public school data. In addition, SEAs should be encouraged to consolidate their data collection, but should be left free to select and implement their own data collection systems, and OBEMLA should designate an SEA liaison to work with SEAs in collecting the required data.

Specific reporting requirements to which federally funded projects must adhere include submitting a written evaluation report annually and/or at the end of the grant period. The Evaluation of Bilingual Education Programs for Language-Minority, Limited-English-Proficient Students study (Tallmadge et al., 1987, 26.1) summarized the state of the art in bilingual education program evaluation and proposed a system of procedures and materials designed to improve the quality of program evaluations. Based on a review of eight studies dealing with the quality of bilingual education evaluation reports, the authors suggest that inadequacies in bilingual education evaluation and research reports can be attributed to evaluator competence, administrative practices, state and federal policy, inherent characteristics of bilingual education programs, student mobility, variation within the population served by bilingual programs, variation in the implementation of treatments, and the small number of students served by programs.

The Review of Local Title VII Evaluation and Improvement Practices (Hopstock, Young, and Zehler, 1992, 48.1, 48.2) provided a description and assessment of evaluation practices and the use of evaluation results. Findings led to a number of recommendations. To improve the monitoring of project evaluations, a centralized system of receipt of reports should be established. Changes in evaluation of Title VII programs toward multi-year data collection were suggested, along with an increased focus on incorporation of process evaluation and a greater emphasis by OBEMLA on evaluation by awarding additional points for evaluation plans on Title VII grant applications. The report also provided suggestions regarding an increased role for the Evaluation Assistance Centers in monitoring evaluation reports, and an increased role for OBEMLA in assisting local projects in their selection of evaluators through the publishing of standards and issuing a list of experienced evaluators. Some required data items should be replaced with others that more specifically pertain to student backgrounds, teacher characteristics and training, parent involvement, and capacity-building. A list of evaluation standards and qualified evaluators should also be devised and distributed.

Overall, these studies point to similar problems and recommendations for increasing the effectiveness of reports. Generally, they all seem to suggest that existing reporting and evaluation purposes and requirements are unclear, or inaccessible.

C. Findings Specific to Asian/Pacific American Students

The Freese and Woltag study (1984, 15.0) provides the only data on Asian/Pacific American populations in this chapter; there are only limited data on sources of financial support for programs indicating that the departments of education in the U.S. Pacific Islands are dependent on federal support.

D. Summary

The administrative findings show that instructional services for LEP students are supported by federal, state, and local resources. About 40 percent of states provide funds specifically designated for LEP students and frequently services to LEP students are supported by combinations of funds (e.g., Chapter 1 Basic Grant and Migrant Education programs, as well as State funds and/or Title VII funds, in addition to general education funds). Private schools, however, are less likely to utilize federal sources of funds.

Cost data are difficult to obtain and there are apparently no clear guidelines on estimating the cost of additional services for LEP students. Part of the difficulty in assessing costs may also come from the use of various categorical programs in conjunction with other funding sources to address LEP students' needs. Over the past decade, state and local resources have supported LEP services much more than federal resources. Although federal funds appear to be important for the continual operation of services for LEP students, the degree to which programs could function without federal funding has not been determined.

In terms of the structure of administrative systems, findings emphasize the need for ensuring information-sharing and coordination among the various SEA, LEA, and school-level staff involved in decision-making and provision of services to LEP students. Findings on the administrative structure of services point toward adopting a holistic perspective on LEP services as the most successful approach. Linkage among different service-providers at the SEA and LEA levels, and collaboration and coordination among teachers and other staff at the school level can offer greater effectiveness in provision of services. Related to this are findings regarding SEA activities which suggest changes in the role of the SEA with regard to Title VII LEA projects. SEAs have also identified a need for a higher level of communication between SEAs and OBEMLA, indicating that they would like to receive more information about Title VII programs and receive feedback on their annual applications.

The diversity and variety of definitions of "LEP" are also represented in the range of criteria and measurements employed for identifying students for entry to and exit from special language-related services. Few districts and states consistently use the same selection procedures.

Federally funded studies over the past 13 years have expanded the knowledge and information available on the administrative structure of special services for LEP students. Additional areas of inquiry exist, however. For example, further information is needed on the extent to which LEP services are coordinated with mainstream services. Instructional services for LEP students are provided through a number of different program delivery structures, some of which may be more effective than others when examined for the quality of the instruction received by a student. Also, administrative coordination at the SEA or district level as well as at the school level may have implications for the efficiency of use of resources and the overall quality of instruction provided to students. Examination of administrative aspects of services provided to LEP students may provide important information on how to implement effective programs for LEP students.

VII. RESEARCH METHODS IN BILINGUAL EDUCATION

A. Overview of the Studies

This chapter is based on a review of the research methods utilized by 17 federally funded research or evaluation studies that included a significant focus on the education provided to LEP children.[1] The studies were selected for review from among the 102 documents in the literature review because they addressed questions about the education of LEP students through systematic data collection and analysis. Appendix C lists the 17 studies and the specific reports associated with each that were included in this review. Whenever possible, all reports resulting from a particular study were reviewed, not only the final technical reports or the research design summaries.

The basic descriptive information underlying the conclusions in this chapter can be found elsewhere in this report. The Appendix B summaries of each study report provide brief descriptions of the research methods. Appendix C presents a more detailed summary of the research methods used by the 17 studies, with the information presented in a series of tables covering selected aspects of research design and implementation. This chapter, on the other hand, takes a broader perspective on the studies, presenting information about them in terms of what they suggest is the state of the art in this field.

B. Research and Evaluation in Bilingual Education

The period during which these studies were funded and carried out was a period of controversy for bilingual education generally and for federally supported bilingual education programs in particular. While major public debates focused on the relative effectiveness of transitional bilingual education and English immersion programs, discussions among practitioners and researchers also included other important questions such as whether native language background was related to ease of learning English, how to teach LEP children academic subject matter, and the extent to which native language learning transferred--among many other issues.[2]

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[1]We do not draw distinctions between research studies and evaluation studies in this review. The purposes of the two may differ somewhat, but the methods employed tend to be similar when considered at the level of analysis in this review.

[2]For discussions of the debates and issues underlying them during the 1980s, see James Crawford (1991), *Bilingual Education: History, Politics, Theory, and Practice*; Los Angeles: Bilingual Educational Services, Inc.; or the series of articles included in M. Beatriz Aria and Ursula Casanova (eds.) (1993), *Bilingual Education--Politics, Practice, Research*; Chicago: National Society for the Study of Education.

It was the major public policy issue of the effectiveness of various methods that this set of studies focused upon. This is not surprising, because the U.S. Department of Education, which is the primary source of research funding in this field, found itself in the position of being asked to describe and validate its own program decisions. One of the conclusions that emerges from a review of these studies is that studies primarily designed to address the issues other than overall program effectiveness have been neglected and overshadowed by the large national studies and evaluations of the effectiveness of various service methods.

C. The Nature of the Studies

In order to understand the methodologies employed, it is important to examine the purposes of the studies. Study purposes can generally be described as either descriptive or analytic in nature, though some studies explicitly combine descriptive and evaluative purposes.

Descriptive studies are focused on providing as accurate and complete a description of a program or programs as possible. The emphases are on sampling precision and using definitions and variables which reflect those actually used in the field. When descriptive studies are faced with varying definitions and variables across sites, they often choose to reflect the actual diversity of theory and practice rather than categorize programs using consistent but widely unrecognized definitions and variables.

Analytic studies, on the other hand, are focused on providing clear and unambiguous assessments or comparisons of programs. The emphases are on rigorous research designs, consistent definitions, and control of extraneous (i.e., non-controlled) variables. In order to draw firm conclusions about the effects of independent variables, analytic studies work best in "tidy," well-controlled environments.

When studies have both descriptive and analytic purposes, these purposes often come into conflict. Descriptive studies must reflect the diversity and "messiness" of actual educational environments to meet their purposes, while analytic studies must seek to limit diversity and "messiness" to be useful. For example, a national descriptive study of services to LEP students would maximize sample size, reflect local definitions, and describe but not attempt to limit the movement of ideas, techniques, and students across educational settings. A national analytic study of services, on the other hand, would limit the number of settings examined, use consistent definitions, and seek to maintain the "purity" of educational interventions.

Most of the research studies reviewed were primarily descriptive in the information they sought. Some of these descriptive studies focused on characteristics of LEP students, while others placed relatively more emphasis on describing LEP-related instructional activities or other organizational-level characteristics. The studies do not fall neatly into one type or another, however, since most also sought to describe relations between selected organizational characteristics and selected LEP student characteristics.

Examples of student-centered studies are the Descriptive Phase of the National Longitudinal Study of the Effectiveness of Services for Language Minority-Limited English Proficient

Students and the Children's English and Services Study. Examples of descriptive studies that are more concerned with providing information about organizations providing services include the National Survey of the Title VII Bilingual Capacity Building and the Significant Bilingual Instructional Features study. Studies such as the Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs are examples of research designed to describe relationships between organizations and students.

A few of the federally funded studies have been analytic as well as descriptive, that is, with explicit objectives to determine program effectiveness either for a single program or by comparing alternative programs. Studies such as the National Longitudinal Study of the Effectiveness of Services for Language Minority-Limited English Proficient Students, which sought to tie student-level outcomes to existing program activities, are typical. Only one study attempted explicitly to compare alternative program models in terms of outcomes, i.e., the Longitudinal Study of Structured English Immersion, Early-exit and Late-exit Transitional Bilingual Education for Language Minority Children. Given the small number of analytic studies comparing program alternatives, the national lack of agreement on what works should not be surprising; simply stated, not enough analytic research has been done.

In terms of overall research strategies utilized, the emphases have been on large-scale survey work, observational studies, and case studies. The survey-based research generally revolved around direct assessment of student performance and attempted to tie performance levels to differences among students and among treatments. The National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students is an example of this approach as is the reanalysis of Sustaining Effects Study data in the Comparison of the Effects of Language Background and SES on Achievement Among Elementary School Students. The observational studies usually sought to develop rich, comprehensive descriptions of classroom behaviors of instructors and students and tie those behaviors to individual differences in student performance. The Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children is an example of this type; other examples include the Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs, and the several substudies of the Innovative Approaches Research Project. Case studies generally were less focused on students than on effects of organizational settings and similar factors on bilingual program implementation; some of the examples included the Descriptive Study of the Chapter 1 Migrant Education Program, the Significant Bilingual Instructional Features Study, Case Studies of Delivery and Cost of Bilingual Education, and Chapter 1 Services to LEP Students.

D. Issues in Research Design and Implementation

This section discusses four issues that created problems for many of the studies which were reviewed:

- Sampling students and programs;
- Defining or specifying the study's subjects;

- Specifying the characteristics of treatments; and
- Measuring outcomes.

Sampling students and programs. LEP students comprise less than 10 percent of the students in the country by most estimates, and, further, they are not distributed randomly in the population. Although they can be found in almost any area in the country, LEP students are concentrated in particular schools in particular districts in particular states. In brief, drawing an efficient and powerful sample of LEP students requires careful attention to their relatively small numbers and geographic concentrations. For example, for the ongoing NELS:88 and Prospects longitudinal studies, it was necessary to heavily oversample locations and/or students to try to ensure sufficient numbers of cases for analysis. Even oversampling may not be sufficient, however, to include LEP children from language backgrounds other than Spanish because of their very small numbers (at least on a proportional basis) within the larger population.

Among the effects of this "rare event" sampling problem are (1) major national general-purpose databases often have too few LEP students to support anything other than the most simple univariate analyses, and (2) what little we do know from the national studies may be applicable only to students from Spanish-language backgrounds. Examples of these limitations can be found in the Prospects study, High School and Beyond, the National Assessment of Educational Progress, NELS:88, and many others.

Contributing to the problems of sampling sufficient LEP students is a high level of attrition of LEP students from the samples of national studies. Some of this attrition takes place prior to data collection, when LEP students are sometimes excluded from the study because they cannot read and complete the English-language surveys or tests. (LEP students are not the only ones who are excluded, as this also is frequent for special education students.) NELS:88 provides an instructive example: OBEMLA provided funds to the National Center for Education Statistics (NCES) to oversample students from Spanish and Asian-Pacific Islander language backgrounds. About half of the LEP students that oversampling was designed to produce were excluded by their schools from participating. As a result, at the first followup, it was necessary to draw a separate sample of those excluded students to try to get some information about them, a Spanish version of the tests and surveys was developed, and special attempts were to be made in the second followup to obtain transcript data for those students. It is not clear how many LEP students will be recovered through these processes, but the number will not be nearly as large as called for by the original sample.

Some of the sample attrition takes place subsequently during the course of the study as is true for every group of students; it appears to be a more pronounced problem for LEP students because that characteristic is tied to others, such as poverty, that are associated with relatively high rates of mobility. Thus, even if the number of LEP students included in the sample design is technically sufficient to meet the analytical needs of the project, excessive attrition at each of the stages may render the sample too small and biased to be useful.

These sample-related problems are not found only in national general-purpose studies, but also in LEP-specific studies. The National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students was originally designed to provide longitudinal data on students categorized by language background; however, by the completion of the three-year study, sufficient data were available only for limited analyses of Spanish-speakers. Other studies, such as the Cheche Konnen substudy of the Innovative Approaches Research Project, deliberately focused data collection on one language subgroup, in this case Haitian Creole, and kept the length and scope of the study narrow enough to permit intensive data collection and followup. As a result, this study was able to accomplish its objectives.

Defining the subjects of the study. As was noted in Chapter III, there is no consistent definition of what it means to be a LEP student. Thus, students who are defined as LEP in one setting may not be defined as LEP in another. The implications of this issue are different, however, for descriptive and analytic studies.

In descriptive studies, the definition of LEP status is a key variable in describing the students and the nature of services which they receive. How one should deal with different definitions is problematic. If a researcher applies a definition of LEP which is consistent across locations but not applied by many of them, the results describe an abstract population which does not relate to actual service groups. On the other hand, if one uses local and varying definitions, actual service patterns are more accurately reflected but readers of study findings may have difficulties generalizing to their own LEP student populations.

In analytic studies, the issue is more clear. In order to make analytic comparisons among groups, it is important that a definition of the subject population be included as part of the study design, and then that the definition be applied consistently throughout the study. This is particularly important for ensuring that students in different quasi-experimental educational treatment groups are truly comparable.

The issue is illustrated in the Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students, which had both descriptive and analytic purposes. The study used local definitions of LEP status. That design decision made the study much more feasible operationally, and produced descriptive results which reflected the diversity of definitions and services. On the other hand, the result at the end of data collection was too much variation among groups on important subject characteristics to permit reliable statistical determinations of program effectiveness.

It is conceivable that in some very controlled research environments an absolute definition of LEP could be used based on behavioral measures, such as a stipulated level of performance on one or more measures of English proficiency. In fact, such performance is

often the reason the subject is in a bilingual education program.[3] In natural program settings, probably the best that can be hoped for is that sufficient measurements be taken so that all those who are labeled LEP fall within agreed-upon limits. This is particularly the case when studies involve comparisons of student-level effects across dissimilar settings, such as the Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs.

In analytic studies, what should not be done is to allow the treatment to serve as the definition of the subjects. Stated in another way, all students in bilingual programs should not be assumed to be LEP or to have the same levels of English proficiency. The Children's English and Services Study and the study of Chapter 1 Services to LEP Students documented that the same students would be selected for services in some sites but not in others.

The use of non-randomly assigned control groups for comparative purposes is frequently insufficient to avoid problems related to subject specification. One reason for this is that it is simply not always practical to control enough of the relevant characteristics; for example, Willig and Ramirez cite Mackey's matrix of combinations of language patterns containing 90 separate cells, each of which is important.[4]

The critique prepared by the National Research Council (Meyer and Fienberg, 1992, 57.0) suggests that the best way to avoid the problem of subject specification in analytic studies is to conduct research within constrained settings (e.g., the same school) to provide some control over the group characteristics of the subjects and assign the subjects to alternative treatments randomly to preclude problems related to unmeasured variations in individuals. While this approach has a great deal of merit in addressing problems of subject specification, it is not free from treatment specification problems, as discussed below.

Specifying the characteristics of the treatments. Just as researchers should not assume that all students in bilingual programs are LEP, they also cannot assume anything is common about programs with the same name except the name itself. The variety that exists within programs sharing a label (e.g., transitional bilingual education) may even be as great as the variety that exists across programs with different labels. (Chapter V of this report discusses instruction-related findings.)

As for subject specification, the implications of this issue are different for descriptive and analytic studies. For descriptive studies, the challenge is to describe the programs in enough

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[3]Because of "regression to the mean" problems, it is not appropriate to use the same performance measure for program selection or subject definition and for determining treatment effects.

[4]Mackey, William F. (1970), "A typology of bilingual education," in Andersson, Theodore and Boyce, Mildred (eds.), Bilingual Schooling in the United States, Austin: Southwest Educational Development Laboratory; cited in Willig, Ann C. and Ramirez, J. David (1993), "The evaluation of bilingual education," in Arias and Casanova op cit.

detail so that the actual treatment is specified. This requires the researchers to gather substantial amounts of descriptive data along whatever treatment dimensions are believed to be significant. Furthermore, the researchers also must continue to collect those data throughout the period of measurement.

The challenge for analytic studies is even greater. Even if random assignment of subjects to treatment conditions is used, the treatment must still be described comprehensively, monitored frequently, and protected from "contamination" for findings about treatment effectiveness to be unambiguous. This threat is particularly acute precisely in the types of locations suggested as most appropriate by Meyer and Fienberg (1992, 57.0), i.e., individual school buildings. The problem of course is that school buildings are not made up of isolated units; rather they are human systems where teachers and students interact across "treatments" with a frequency that belies attempts to control the treatment effectively.

Most of the studies reviewed for this report were sensitive to the point that program labels are often inadequate and, accordingly, either sought to identify programs that had desired characteristics or attempted to describe the programs in enough detail so that the actual treatment was specified. Many of them, however, were less sensitive to another critical point, that of determining the extent to which individual students actually received the treatment being studied. Students in the same classroom do not necessarily have the same instructional experiences. Their instructional experiences may differ based on factors such as their levels of knowledge of the language(s) used in the classroom, their attendance patterns, and grouping patterns in the classroom. Instructional experience thus can vary significantly across individuals even when treatment, measured at the classroom or other non-student level, is controlled. The Longitudinal Study of Structured English Immersion, Early-Exit and Late-Exit Transitional Bilingual Education Programs pointed out the importance of this problem and did attempt to capture some of this information. The Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students also attempted to examine instruction from a student perspective.

Problems related to this issue are reduced, although not eliminated, if treatments and outcomes are measured at the same level. More commonly, however, studies measure treatments at the classroom (or higher) level and measure outcomes among individual students. When outcome analyses are conducted at the level of individual students but treatment is measured at an organizational level, there is usually an implicit assumption that all students within the specific organization receive the same treatment. In situations in which students can be assigned either on a random or on a very systematic basis, this assumption probably does not lead to much extra variation being added to the analysis. In situations where subject assignments to settings cannot be controlled, however, it is usually better to aggregate subject-level data to the organizational level. Such approaches are very expensive, because it is necessary to include enough classrooms or buildings for that organizational sample to have sufficient power to find effects.

Measuring outcomes. Studies of services to LEP students are not easy to design and implement, as noted from the above discussions. One of the reasons for the difficulty is that people disagree about the goals of bilingual education programs and, therefore, about what

should be measured and how. These problems in measurement are particularly noticeable for student-level outcomes.

Throughout much of the period covered by the review, bilingual education found itself immersed in controversy at the federal level about what its goals should be: should programs for LEP students be judged solely on the basis of how quickly LEP children learned English, or should judgments of effectiveness include other topics including other academic subject learning or native language proficiency? For the most part, the answer at the federal level was that English language proficiency was the most important goal.[5] Thus, measurement of outcomes focused on English proficiency was the primary research objective for most of the studies concerned directly with LEP students. Only eight of the 17 studies included other academic subjects in their designs (usually mathematics), and only three included native language proficiency. Other learner objectives, although included in data collection, were sometimes not addressed in analysis because they were given a much lower priority than the English proficiency outcomes. Both of the two major longitudinal studies, for example, collected data on achievement in academic subjects and native languages, but those data were not analyzed.

By the end of this period, studies did tend to incorporate broader outcome perspectives. The National Evaluation of Services for LEP Native American Students measured and analyzed English proficiency, other academic proficiency, and native language proficiency. The Descriptive Study of Exemplary Special Alternative Instructional Programs collected data on English and other academic subjects, and the Innovative Approaches Research Project's main focus was on achievement in academic subjects.

To a certain extent, how the outcomes are measured is as important as what is measured. Language acquisition is a notably complex process, and researchers and theorists do not agree on the steps involved, their sequence, or their transferability to other learning. Thus, some studies operationally defined English proficiency as oral language use as reported by teachers (e.g., National Longitudinal Study of Effectiveness of Services for Language-Minority Limited-English-Proficient Students, Descriptive Study of Chapter 1 Migrant Education Program), and others relied on standardized test results of English reading comprehension (Descriptive Study of Exemplary Special Alternative Instructional Programs). Leaving aside questions about the appropriateness of those measures, it is clear that they are probably not measuring the same thing.

In fact, even for the same outcome, different instruments may be too dissimilar (i.e., lack convergent validity) for comparing different groups, particularly since instruments for LEP students rarely have national norms that are anchored to other measures or are standardized across language groups. This does not mean outcomes cannot be measured; it does mean that studies should describe what measures they are using, should provide data about the reliability and validity of those instruments for the population being studied, and should

[5] Crawford (1992), op cit ; Willig and Ramirez (1993), op cit.

explain why the outcome being measured is important. Most of the studies reviewed did not provide detailed discussions of these issues.

E. Conclusions

As a result of our review, we have come to a number of conclusions concerning federally supported research efforts related to services to LEP students:

(1) The emphases of most of the studies have been on descriptive rather than analytic purposes. When descriptive and analytic purposes have been combined in a single study, the research designs and implementations have focused on the descriptive purposes.

(2) In general, descriptive research questions have been better addressed by studies with larger scope, while analytic research questions have been better addressed by studies of smaller scope. The types of controls which are extremely important for research answering analytical questions are very difficult to implement in large, multi-site studies.

(3) Many of the studies have been overly ambitious in design. They have attempted to address too many questions about too many groups of students with too few resources.

(4) The lack of a nationally accepted definition of LEP has caused considerable problems among researchers and practitioners. Unless or until a common definition emerges, there will be problems in implementing research and interpreting research findings.

(5) There is a similar lack of nationally accepted standards for assessing the outcomes of programs serving LEP students. The development of such standards would help to focus research efforts relating to LEP program effectiveness.

(6) There has been insufficient attention paid to how individual students "receive" instructional treatments. Data collection concerning instruction is typically performed at the classroom level, so differences within classrooms or as individual students move among classrooms are not detailed. Such within-program variation complicates comparisons of treatment groups, but its documentation is extremely important for both descriptive and analytic studies.

VIII. SUMMARY AND CONCLUSIONS

The years 1980 to 1993 were a significant period for the Title VII program and for Title VII research on bilingual education. Following the 1978 reauthorization of Title VII and the creation of the Part C Committee, a research agenda was established for the first time to develop information related to the instruction of LEP students, the effectiveness of programs for LEP students, and to Title VII program management and operations.

At the same time, new information and understanding about learning processes were developed both with regard to learning a language and with regard to academic learning, especially in the areas of mathematics and science. The research findings were used in defining reform efforts and efforts to restructure schools and schooling.

This review of the federally funded research therefore covers a period of much activity in the educational field and several of the research studies, particularly more recent studies, have reflected some of those changes. Overall, a considerable amount of information has been provided about LEP students and the services they receive. Now, some 14 years since the call for research in the 1978 legislation, much is being questioned about our schools and educational practices as educators work to address the President's goals for America 2000. It is therefore important to reassess what has been learned in the federally funded research on limited English proficient students to identify future research directions.

Section A of this chapter provides a brief overview of the findings within the four categorical areas outlined by OBEMLA as the focus of this review: student, teacher, instructional, administrative. In each of these areas, the relevance of the research themes identified in the Chapter 2 framework is discussed and further research questions are listed. In Section B, a proposed research agenda is presented, in which specific studies are outlined.

A. Overview of Findings

Student-Level Findings

During the past decade, a substantial number of federally funded studies have attempted to determine the size of the language minority LEP student population in the United States and to describe the characteristics of that population. Twenty-eight studies were included in this review. The methods and findings of these studies are considerably diverse. What these studies clearly show is that this population is an increasingly diverse one with wide variation in such factors as socioeconomic status, language background, English and native language proficiency, educational experience, and parental involvement.

Different estimates and projections of the size of the language minority LEP population exist. Efforts at determining the size of the language minority LEP population were affected by a number of factors. These included the purpose of the

study, the methodology employed, and the interpretation of the findings. The greatest discrepancy in the estimates and numbers provided resulted from the use of a variety of definitions of the population receiving special language-related services. In some cases, local definitions were employed in determining the population. In other cases, study researchers defined the population. Clearly, no standard, universal definition of "language minority limited English proficient" has been used, and therefore the estimates have differed.

There is a diversity of language backgrounds and ethnic groups represented within the student population. Language and ethnic background have been related to a number of important issues concerning the identification and education of LEP students. For example, language proficiency was found to be tested most often in English; only sometimes were both the native language and English measured. Regarding the socio-economic levels of students, Spanish language groups represented low SES levels and Chinese language groups were at the middle socio-economic level. The views of parents regarding educational aspirations, involvement in the education of the student(s), and value of education also differed by ethnic group.

Overall, these findings point up the diversity that exists with regard to language minority limited English proficient students. This diversity is found in student factors such as language group, ethnic group, socioeconomic status, age, grade level, and parental education and attitudes/beliefs.

Implications for practice. If new learning is based in important ways upon the knowledge and experiences that a student brings to the classroom, it is important to understand the background knowledge of the student and recognize its implications for instruction. For example, cultural understanding about school and behavior, academic knowledge from past schooling, types of instructional experiences in past schooling, as well as the level of literacy and academic skills that the student has attained will provide resources that the student can use. Or, understanding of the student's background can identify where differences in background knowledge or experiences may present some barriers to learning that should be addressed. It is therefore important to understand as much as possible about the skills, resources, and differences in knowledge of language minority LEP students as compared to those expected of non-language minority, non-LEP students.
The diverse and complex needs of the students, whether language background-based, tied to poverty-levels or age, or related to other differences in the student's background, including parental factors, should be considered when designing instructional services and practices for LEP students.

Research Questions. The student-level findings suggest the following areas of further research:

- **What are the beliefs of parents of LEP students regarding their proper role in their children's education and in the school?**

  The findings of this review indicate the importance of parental involvement. While much research has been carried out on parent involvement in school, there is not sufficient information on what beliefs parents hold about what their role in the school and in their children's education should be. Based on the findings thus far, these are expected to differ by cultural group. Once identified, then steps can be taken to assist these parents toward communication and involvement that will benefit their children.

Teacher-Level Findings

Among the federally funded studies reviewed in this report, 25 examined the characteristics of teachers who work primarily or solely with the language minority LEP population. A number of studies presented teacher-level findings as one set of features influencing effective instruction. One summary report included information on bilingual education and ESL teachers as a subsection within a larger profile of the U.S. teaching force. Nine studies focused specifically on describing characteristics of teachers of language minority LEP students.

Overall findings from the studies indicated that there was substantial variation among ESL, bilingual education, and regular classroom teachers in terms of demographics, education and training, language and culture, certification, and attitudes toward instruction. The demographic profile of a typical bilingual education teacher that emerged from these studies was a minority female between 25-34 years old. ESL teachers also tended to be female, but they were more often White and over 34 years old.

Studies also indicated that the majority of ESL and bilingual education teachers in both public and private schools had at least a bachelor's degree and were state-certified to teach. Moreover, as many as two-thirds of the teachers of language minority LEP students could speak the native language of their students. However, most of these teachers had less experience than regular classroom teachers and did not necessarily have credentials in bilingual education or ESL.

As part of their capacity-building efforts, many of the programs described in these studies offered preservice and inservice training to staff who instruct language minority LEP students, including teachers and aides. Teacher training programs varied across projects and districts, with district size, language minority enrollment, and other factors affecting the extent to which training was offered as well as the content and type of training.

Findings from studies focused on different instructional approaches indicated that teacher characteristics and collaboration efforts strongly affected practice. In several studies, teacher attitudes were linked to their use of a particular instructional approach. Teachers with bilingual education credentials and native language proficiency, for example, favored use of the native language for instruction. Teacher collaboration was viewed as an important criterion for implementing positive classroom changes, especially among the Innovative Approaches Research Project (IARP) models.

Implications for practice. The two themes outlined in the framework (passive to active, and decontextualized to contextualized) have been linked with substantial change in teachers' roles, which will require teachers' developing new perspectives and beliefs about how they should interact with students in the classroom and about the types of instructional activities they should facilitate. Their level of implementation of such approaches will depend upon the degree to which teachers' beliefs about practice and about the learning process make this shift in perspective. Therefore, when restructuring is the goal, teachers' beliefs and understandings need to be the focus of the restructuring efforts as much as changes in activities in the classroom.

The emphasis on community within the school, and on collaboration among school staff in the development of a whole school "culture" suggests the importance of having all staff in a school see LEP students as part of their responsibility so that a culture of support for LEP students is developed. The implication of this is that mainstream teachers are important members of this community of support for LEP students. However, much less is known about mainstream teachers related to their beliefs about instruction of LEP students and their understanding of their own role in relation to LEP students (as well as instructional practice, an issue addressed in the next set of findings).

Finally, the more recent emphasis on community resources being incorporated into classroom instructional activities requires that teachers understand the importance of this effort and the potential benefit it can have for their students. Teachers need to cultivate an openness to and awareness of resources in the students' backgrounds and communities.

Research Questions. The findings suggest the following areas of further research:

- **What are the beliefs of mainstream teachers regarding the instruction of LEP students and their role in this? What are mainstream teachers' beliefs regarding the best instructional strategies and materials to use with their LEP students?**

- **What have been the sources of information provided to the mainstream teacher regarding instruction of LEP students? (e.g., inservice, preservice, etc.)**

- **What information about LEP students do mainstream teachers of LEP students need?**

Instructional-Level Findings

Fifty-seven of the studies in this review of selected federally funded studies focussed specifically on the instructional services provided to language minority LEP students. Although a few of the earlier studies tended to focus on estimating the numbers of language minority LEP students who received special services, the majority of the studies provided descriptions of particular services provided to these students. The research showed a gradual movement toward describing effective instructional techniques within different programs while the most recent studies have tended to describe innovative program models that incorporate some of these techniques.

Along with the change in study focus came a corresponding shift in the definition of program effectiveness. Studies which reviewed the evidence supporting bilingual education programs typically defined effectiveness as English language proficiency or academic achievement as measured by standardized test scores. Only a few concentrated on consequences such as improved self-esteem and motivation. In later years, however, the emphasis of the study objectives broadened to incorporate some of these affective changes. There was a concomitant widening in the scope of the instructional environment to include not just student and teacher characteristics, but also aspects of the school and community.

Findings from studies of effective instructional practices concluded that appropriate use of the native language and culture, adequate content area instruction, and an active learning environment could improve student outcomes in several areas. English was the predominant language of instruction in most programs, with the native language used more often for specific subjects and students. Students with low oral English language proficiency, for example, frequently benefitted from instruction in their native language.

Some of the recent studies of instructional models have targeted innovations in content area instruction. The twin goals of these programs have been to develop higher-order thinking skills among students and to promote community-wide involvement in education.

Throughout many of the studies, it was suggested that the failure or success of a program in meeting its goals often depended on such factors as staff attitudes and qualifications, student enrollment and language diversity, and the availability of funding. In fact, findings from one study indicated that the existence of adequate resources was more likely to

Implications for practice. Reform efforts related to instruction imply very different roles and responsibilities for teachers and students in the classroom. These require new patterns of interaction for teachers in terms of language use with students, and in terms of how teachers and students interact as well as for how students work together. With the exception of the IARP models, efforts toward restructuring of classroom instruction toward more active, student inquiry models have not been concerned with the application of these

approaches in classrooms where there are language-minority LEP students. Implementation of these approaches will require sensitivity to cultural differences that might affect students' participation, and careful thinking about how best to work in these settings with the additional diversity introduced by differences in English language proficiency.

Research Questions. The findings suggest the following areas of research:

- **What strategies do schools and districts employ to provide services to LEP students who enter middle and secondary schools with very low levels of literacy skills and/or very limited schooling experience? What is the involvement of these students in vocational or tech-prep programs, if these are services that they receive? What are effective models for secondary level low literacy students? What goals should be set for these students?**

- **What approaches are used by mainstream teachers in instructing LEP students in their classes? What guidelines can be given to mainstream teachers who have LEP students in their classes on how to provide them with active involvement in the classroom learning activities?**

- **What types of materials and other resources are needed to support active, student-inquiry-based instruction for LEP students? What types of guidelines can be provided to teachers in developing materials and identifying resources? How are the needs of language minority students best addressed in working with these materials?**

- **How should cooperative student working groups be comprised when there are students from different levels of English language proficiency, and when there are LEP and non-LEP students included? I.e., what are the most effective ways to compose student working groups given different combinations of students that include LEP students?**

- **What are the implications of cultural background for involvement of students in cooperative approaches to instruction? What can/should teachers do in working with students who due to their cultural backgrounds are less comfortable in instructional activities that require working in groups?**

- **What are the implications for assessment of LEP students working within such approaches? What assessment models/approaches should be used and/or how should proposed alternative assessments be adapted for LEP students?**

Administrative-Level Findings

Twenty-eight federally funded studies included in this review addressed administrative-level features of programs for language minority limited English proficient students. Public school administrative features were highlighted in 27

reports; the remaining study reviewed characteristics of private school administration. Findings reveal that a number of factors contribute to the complexity of the development, implementation, operation, and evaluation of services and programs for LEP students.

The sources of funding and use of funds play a major role in the provision of services. Findings show that state and local funding provide the majority of funds for programs; however, federal funding is still extremely important for providing services to LEP students. Funds from each source are most frequently directed toward instructional services.

The difficulty and discrepancies in calculating costs of services resulted primarily from the lack of a standard formula which all programs could employ for determining per pupil costs.

Another factor important in the provision of services entails the administrative structure of programs. The extent to which the state, local, and school administrators communicate affects the overall provision of services to LEP students. Generally, collaboration, communication, and coordination among LEP personnel and the mainstream staff enhanced the services students received.

The variety of ways which are employed for defining "language minority limited English proficient" is reflected in the entry and exit procedures utilized for placing students within special services. Standardized tests of oral English proficiency were reportedly the most frequent assessment tool used, followed by measures of reading and writing in English. Native language skills are rarely assessed.

There are concerns with the quality of data collected for reporting requirements. In fact, grantees as well as OBEMLA staff were reportedly uncertain about the purpose, use, and quality of data collected. Many recommendations listed across the studies indicated the need to develop a centralized evaluation and accountability system which would specify to grantees the exact information to include in evaluation and performance reports. Such a system would also help to clarify the reporting requirements and process.

Implications for practice. The emphasis on contextualization of learning and on the overall school context is important to support students' learning. The research findings showed that collaboration among teachers is one mechanism for ensuring a more effective environment. In addition, coordination of instructional services and the development of mechanisms for sharing of information by teachers are aspects of services that can be promoted at the administrative level within the school. There have not been any findings in the research reviewed here regarding the principal's beliefs regarding instructional services for LEP students and beliefs regarding the responsibility of mainstream teachers in instruction of LEP students. However, the principal can play an important role in shaping a shared "culture" of support for LEP students. Also, coordination among services that are provided to LEP students are

important if a more integrated view of instructional services to LEP students is taken, i.e., one that looks at all instruction provided and that does not only describe special services in isolation.

Research Questions.

- What are specific steps that teachers or schools can take to implement collaboration across LEP and regular classroom teachers? In what ways can principals facilitate development of collaboration among staff in their schools in serving LEP students? What are recommended steps in implementing and maintaining such collaboration?

- What are the beliefs of principals about instruction of LEP students, and what have been the sources of information provided to them? What would principals like to know about LEP students? What do principals need to know about LEP students?

- What types and levels of interaction are there among teachers of primarily LEP and teachers of primarily non-LEP students? Are there effective models of collaboration?

- What are model examples of coordination among programs that serve LEP students at the SEA level? What are the outcomes of such coordination? What are some effective mechanisms for promoting this coordination? What are suggestions for their implementation?

- What are model examples of coordination among programs that serve LEP students at the district level? What are some effective mechanisms for promoting this coordination? What are suggestions for their implementation?

Asian/Pacific-American Findings

Few of the federally funded studies provided for this review focused specifically on language minority, limited English proficient Asian/Pacific-American (APA) students, although many reports included some data relevant to these populations. Overall, the findings that could be reported in this review were quite limited.

The one study with a specific focus on the APA limited English proficient population was conducted in the U.S. Pacific Islands. In this study, Freese and Woltag (1984, 3) investigated the characteristics of the total student population, the educational services offered to limited English proficient students, the training and background of instructional staff, the administrative nature of programs and services, and the social and economic factors affecting the provision and delivery of services. Findings indicate that the U.S. Pacific Islands represent a linguistically, culturally,

geographically, and politically diverse population. In some areas, nearly the entire student population speaks English as a second language, representing a variety of native language backgrounds. The language backgrounds and English proficiency levels of the instructional staff are equally diverse. In elementary grades, the native language is usually used for instruction. An array of instructional approaches are employed to meet the needs of LEP students yet the limited resources, materials, and funding sources affect the quality of the services offered to LEP students.

Six additional studies included segments of the Asian/Pacific-American population in their samples. These studies frequently linked various Asian ethnic and language groups together within one group, "Asians". Thus, many of the characteristics unique to specific ethnic and language groups are masked in generalizations of the Asian group.

Overall, the Asian non-English language background population was expected to increase to 2.3 million by the year 2000. Of this population, the highest rate of growth was projected for the Vietnamese. Instructional services to APA language minority LEP students differed, as did parental preferences and involvement in schooling. Generally, teachers of native Chinese-speaking students were less likely to have received training in ESL and in working with this population than teachers of students with other native language backgrounds. Parents of Chinese-speaking students often preferred English immersion programs; native language and culture instruction occurred through private programs and discourse in the home. Parents of Vietnamese-speaking students, however, felt that the school should provide native language and culture instruction about five years after a student has arrived in the U.S.

Analysis of Methodology

The methodologies of 17 of the research studies funded by the federal government during 1980 to 1993 were reviewed. Each of these studies was considered significant in that they sought to systematically answer major policy questions about the education of language minority LEP students. Among these publicly-debated issues was the relative effectiveness of bilingual education programs in improving the English language proficiency and academic achievement of language minority LEP students. Additional study questions related to determining the specific student, instructional, and administrative characteristics that achieved positive student outcomes.

Although the majority of the reviewed studies were descriptive, some were evaluative analyses of program alternatives. Three main methodological strategies were employed within these 17 studies: survey, observation, and case study research approaches. The focus of the study questions varied, with seven studies directed at the student level and six studies emphasizing project or district-level information

regarding the education of language minority LEP children. The focus of three studies was not language minority LEP students, but rather programs which serve both English proficient and LEP populations.

Overall, the study findings present a broad perspective on the education of language minority LEP students and contribute substantially to the body of research knowledge in this area. Nevertheless, few of the studies completely met their objectives because of problems in the research design or implementation. These problems were especially found among the large-scale studies in identifying causal relationships or generalizing findings. Studies with a less ambitious scope tended to produce more useful findings that showed a clearer link between program treatment and result.

Definition/Measurement Issues

Federally funded studies over the past thirteen years have addressed the educational needs of the language minority limited English proficient population. These studies investigated the characteristics of the student population, the teaching staff providing the services, the actual programs and services offered, and the structural components of the programs and services. Comparisons across these studies, however, should be interpreted with caution, given differences in the definitions used in the various studies. This was found to be the case with regard to the student, teacher and instructional findings.

Estimates of students eligible for special services used both LEP and NELB populations; and when LEP students were identified as the population of interest, the means by which these students were identified differed. For example, in the National Longitudinal Evaluation of the Effectiveness of Services for Limited English Proficient Students, local definitions of LEP were used; in other studies, a standard definition of LEP was applied. With regard to teachers, the National Longitudinal Study defined as teachers of LEP students all teachers who taught academic subjects and who had at least one LEP student in their class; the population of teachers therefore included mainstream teachers. Other studies focused on bilingual education and ESL teachers only.

B. Specific Recommendations for Future Research

The Office of Bilingual Education and Minority Languages Affairs (OBEMLA) has been concerned with issues related to students from diverse linguistic and cultural backgrounds. The knowledge that OBEMLA has gained through this work can become an important resource to the U.S. Department of Education as the nation struggles to meet the goals set by the President for achievement of U.S. students by the beginning of the next century. Diversity is becoming common in schools and classrooms and educational reform efforts will need to address the question of how reform efforts should incorporate linguistic and cultural minority and LEP students. The future research agenda related to limited English proficient

students and programs that serve these students should reflect the awareness that issues related to Title VII students and teacher training are increasingly issues related to large proportions of our nation's students and teachers. In this section, we provide some specific recommendations regarding future research, based on the findings of this review. First, however, we address the question of the types of methodological approach that should guide the design of future studies.

Methodology

Based on our review of recent studies and their methodologies, we have formed a number of conclusions about how future research efforts should be directed:

(1) In general, the studies should be more narrowly focused, with only a few research questions addressed in each study.

(2) A list of specific policy-related and/or practice-related research questions should be assembled, and the questions should be prioritized by OBEMLA after consultation with the field. No research question should be included unless a clear statement can be made about who will use the results, and in what ways. The Department should then find the appropriate mechanisms to fund research projects on the highest priority questions.

(3) The nature of the studies should be guided by the nature of the research questions. Factors which would influence the selection of specific methodologies would include whether the questions were descriptive or analytic in nature, the types of persons best able to provide the information, whether the data collection involves objective data or subjective measures, and the extent to which specific methodologies have successfully addressed similar questions in the past.

Our review suggests that much more attention and creativity needs to be directed towards the methods used for data collection. For example, we agree with Meyer and Fienberg (1992; 57.0) that survey research efforts should be preceded by an exploratory phase involving more qualitative research, in which the researchers observe program activities and informally interview potential survey respondents. Such investigations allow the researchers: (1) to assess the potential value of various survey research activities (e.g., can and will teachers provide this information?); (2) to understand the issues and concerns of practitioners; (3) to define the likely response categories for close-ended survey items; and (4) to understand the meanings, implications, and limitations of survey responses.

Also, the standard research methodologies have been inadequate for addressing a number of important research questions. For example, in attempting to provide a complete description of the services which a particular LEP student receives, a number of studies have found that no single person in a school can describe a student's entire school experience. This is true because in many cases teachers or other school staff have only a partial picture

for that student. Case studies would appear to be an appropriate mechanism for developing more complete pictures, but case study methodologies most typically have focused on the classroom or school level.

For some research questions, we suggest that a "journalistic-style inquiry" may be most appropriate. Journalists are specifically trained: (1) to focus on the personal experiences of individuals; (2) to provide clear and concise answers to the questions of who, what, where, when, and why; (3) to concentrate on getting the facts right, and to obtain the needed information from varied sources as needed; and (4) to verify information if at all possible from at least two sources.

As an example, a study to identify the full set of non-instructional services received by individual students would be a very appropriate one for a "journalistic style inquiry", since such services tend to be provided by a range of individuals, and often no one person can provide information about all of the services. In the case of a research topic such as this, we would envision a researcher visiting a school site, prepared with the names of individual students who would be the focus of the research. The researcher would ask questions of various staff as needed to identify formal and informal areas of non-instructional services provided, follow-up on leads mentioned, etc.

A journalistic-style inquiry could be combined with more traditional methods through the use of standardized reporting sheets, which can then be summarized across observations. Journalistic-influenced approaches would appear to be particularly useful for questions in which no single respondent or source can provide complete information, or in which respondents do not readily want to provide information or admit to unpopular beliefs or ideas. Journalistic-style inquiry could answer questions about a small but random sample of LEP students at a school, and the results across a random sample of schools could provide conclusions on a national basis.

In addition, we suggest that use of interviews with LEP students or with former LEP students may be valuable and provide important information on services that cannot be validly obtained through other sources. The use of interviews with students to obtain information on services and other issues would very likely be most productive at the middle and high school grade levels (or with students who are older but have graduated or left school). Using the same example of a study on non-instructional services, the best source of information on what services have been received by a student would very likely be the student him/herself, given that many different persons may have functioned as liaisons with services.

Below we list several studies which we believe would address important research needs. These are primarily descriptive in nature; in these areas we believe that we need to learn more prior to designing analytic studies comparing specific components or approaches. In listing these studies we have attempted to outline research approaches and to justify the purposes, rationale, and policy-related uses of the findings to be developed.

STUDY 1: A descriptive study of non-instructional services provided to LEP students

Objective: To describe the informal and formal non-instructional services provided to LEP students at elementary, middle, and high school levels.

Rationale: Given that many LEP students come from low-income families, they are likely to be in need of many services to address non-instructional needs such as food, health care assistance, etc. These may be important aspects of effective programs; but none of the studies included in this review addressed non-instructional services.

Research Questions: What non-instructional services are provided? What formal and informal mechanisms are used to provide these? What student background characteristics are linked with need for non-instructional services? Typically, for what period of time or number of episodes does the LEP student's family utilize these non-instructional services? Do teachers play a role in linking families with social services when needed?

Methodology: A national study would be carried out, with students selected based on an analysis of a national sample of schools and students. A sample of about 30 schools would be selected, with about five students identified at each school. Researchers would visit the schools to obtain information on the five students' receipt of non-instructional services. At the middle and high-school level, students themselves would be interviewed for information on non-instructional services received.

Policy Implications: Findings would identify the level of importance of non-instructional services to LEP students' families and thus to the student's ability to fully participate in school. Based on the findings of types of services provided and the formal and informal mechanisms through which they are provided, specific assistance and /or guidelines could be provided to schools and districts regarding the provision of non-instructional services. For example, it may be found that teachers are frequent sources of informal assistance but they usually do not have knowledge of the social services available or have any contacts they can go to. If so, development of training for teachers and information packets that they can use to resolve non-instructional service needs of their students' families could be developed and provided.

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STUDY 2: **A descriptive study of the services provided to low-literacy middle and high school students**

Objective: To describe the nature of instructional services provided to students who enter middle and high-school grades with very limited or no literacy skills in their native language.

Rationale: Many schools and districts are facing large numbers of older students who enter without the level of literacy skills in their native language that would be expected for a student of their age. Without a basis of literacy knowledge in even their first language, these students present very special needs to educators. Given the older age of these students, there is also the issue of graduation requirements. More information needs to be obtained about the nature of the problem and about how districts and schools are providing for these students. Only after particular models have been identified, and a consistent rubric for describing the student populations, can a follow-up analytic study comparing different approaches be designed.

Research Questions: What are the goals of instruction for low-literacy middle and high-school students? What types of instructional services are received by low-literacy middle and high-school students? Do students receive vocational or job-skills training? What academic content area instruction do they receive?

Methodology: Case studies of highly-impacted districts would be carried out. A journalistic inquiry approach would be used to identify the sets of services received by individual students at each site. Again, as in the prior study, the sample of districts would be identified based on a national database; both middle and secondary schools would be included. An initial sample of 10-15 highly impacted districts would be visited where both middle and secondary schools with low-literacy recently arrived students would be available, and a sample of students would be included within each.

Policy Implications: The description of a variety of models for working with low-literacy middle and high school students can be used to inform districts nationwide about approaches that they can try in working with these students. As needed, specific materials to support selected approaches can be developed, and where necessary, involvement of districts and SEAs in issues surrounding graduation requirements for these students could be clarified.

STUDY 3: **A study of parents' beliefs regarding their role in their children's education and in the school**

Objective: To describe the nature of parents beliefs regarding what they feel their role in education should be.

Rationale: Parent involvement is considered an important component and valuable asset to an instructional program. Research suggests that home and community involvement bring important "funds of knowledge" to the educational process, and students see their parents value education through involvement. However, many programs find it difficult to communicate with and obtain involvement of parents of LEP students. There may be many different reasons for their lack of involvement; one very important one would be their beliefs regarding what their role should be. This is expected to vary from culture to culture.

Research Questions: What different beliefs do parents of LEP students hold regarding participation/involvement? What are parents' goals when they do become involved in some way? What prompts some families to become involved while others do not?

Methodology: Information on parents' beliefs would be obtained through focused interviews carried out in at least three different locations per language group to obtain a range of parent educational levels and income levels. Interviews would be carried out with a purposive sample of Spanish, Chinese, Vietnamese, Hmong, Russian, and Navajo parents by native speakers of the language. Sites would be identified based on schools with parent involvement activities and with speakers of the identified language groups, through use of a national sample.

Policy Implications: With information on parents' beliefs about their roles, schools and districts will be able to use the information to design better involvement programs that will take the differing viewpoints into consideration. In addition, districts and schools will better understand how parents who are less likely to come to the school might be given further assistance in understanding what they can do as parents to help their children succeed, based on the findings of the study.

STUDY 4: A study of regular classroom teachers' beliefs regarding instruction of LEP students

Objective: To describe the beliefs held by mainstream teachers who have LEP students in their classes regarding the instruction of LEP students. The objective will be to understand the underlying theory of learning of the teachers, the types of activities they use with LEP students in their classes, and the degree to which LEP students' activities are related to the activities of other students in the class.

Rationale: Often, the description of instructional services provided to LEP students is focused on the Bilingual or ESL component. However, research has emphasized the importance of the whole context of instruction and thus, certainly, the whole instructional experience received by a student is important. If mainstream teachers provide much of LEP students' instruction, as is the case for programs using pull-out models of services, a major component of services will be the instruction received by the LEP student within the regular class. Mainstream teacher's beliefs regarding LEP student instruction will be important to understand as a basis for defining further training need and need for additional resources.

Research Questions: What are mainstream teachers' beliefs regarding the types of learning activities that are most effective for LEP students in their classes? To what extent do mainstream teachers believe that LEP students in their class can become involved in the same instructional activities with non-LEP students? What types of materials do mainstream teachers believe are most effective for the LEP students in their classes?

Methodology: These types of data would best be obtained through a case study approach that would include intensive interviews with teachers, classroom observation, and review of materials.

Policy Implications: Based on information regarding mainstream teachers' beliefs, school and district personnel will be able to provide mainstream teachers with materials that they will find useful. In addition, information derived from this research would be useful to principals and other administrators who are attempting to build a more comprehensive environment of support for LEP students in their schools. Based on the findings, it will be possible to identify means of addressing mainstream teachers' concerns, and of providing information to answer their concerns.

STUDY 5: **A descriptive study of principals' beliefs regarding instructional services for elementary, middle and high school students**

Objective: To describe the beliefs and understandings on the part of principals at the elementary, middle, and secondary levels, regarding the instruction for LEP students, and to describe principals' beliefs regarding the roles and responsibilities of mainstream teachers in providing instruction to their LEP students.

Rationale: The emphasis on the whole school context for instruction implies that the role of the principal is an important one in facilitating coordination and collaboration among instructional staff, in developing a school-wide support for LEP students, and in providing support to teachers in their efforts to reach out to the community resources. Efforts to promote the development of school-wide support for LEP students will need to involve working with principals. However, as the research has shown, the beliefs held by persons regarding instruction and the learning process play an important role in the extent to which new behaviors and approaches will be accepted and implemented.

Research Questions: What are the beliefs of principals about instruction of LEP students, and what have been the sources of information provided to them? What would principals like to know about LEP students? What do principals need to know about LEP students to assist them in building school support for LEP students?

Methodology: The use of in-person interviews with principals at a sample of elementary, middle, and high schools, selected to include schools with large numbers of LEP students as well as schools with small numbers of LEP students. The information gained through the interviews would then be used to structure survey items for a broader survey of principals' beliefs regarding instruction of LEP students.

Policy Implications: The findings obtained would be used to provide principals and districts with guidance and information that would address the informational needs of principals related to LEP students and their instruction, that would address concerns regarding LEP students identified in the interview data, and that would offer suggestions to principals for building support for LEP students in their school.

STUDY 6: **Study of mainstream classroom teachers' use of peer pairing within their classes.**

Objective: To identify and describe one strategy that mainstream classroom teachers apparently use for working with LEP students in their classes.

Rationale: Mainstream classroom teacher's strategies for working with LEP students have not been described. However, the use of peer pairing or peer tutoring has been mentioned as a strategy by many mainstream teachers. Peer tutoring in other instances has been found to be an effective means of assisting students. However, we do not know how mainstream teachers utilize peer pairing, what language use restrictions they place, if any, what types of pairs they create, etc.

Research Questions: To what extent do mainstream teachers use peer-pairing of LEP students in their classes? How do they utilize the peer pair? How are students paired? How is the work carried out by the pair related to the work carried out by others in the class? How effective do teachers believe peer-pairing is? In what way do they see peer-pairing assisting the students?

Methodology: The first phase would involve case studies of approximately five sites where use of peer-pairing was reported by teachers. The case study research would involve focused interviews with teachers regarding their use of peer-pairing in the classroom. Based on the findings of the case studies, survey items would be developed for a national survey on the use of peer-pairing by mainstream teachers who teach LEP students.

Policy Implications: Based on the findings, schools would be able to provide guidance to teachers regarding their use of pairing, offering suggested ways to pair students, problems that might arise, how to structure the activities of the pair, etc.

STUDY 7: **Study of mainstream classroom teachers' use of aides in work with LEP students.**

Objective: To identify and describe the use of aides by mainstream teachers who teach LEP students in their classes.

Rationale: Mainstream classroom teacher's strategies for working with LEP students have not been described. However, many mainstream teachers have aides placed in their classes. Some of these aides may have language skills in the native language of the LEP student; although not all will. Often the only service received by a student within smaller districts will be the part-time services of a bilingual aide in the class. We do not know how teachers use these aides.

Research Questions: How do mainstream teachers of LEP students utilize bilingual aides placed in their classes? How do mainstream teachers of LEP students use monolingual English-speaking aides? What types of support activities of the aide are viewed as most helpful to the teacher's ability to work with the LEP students?

Methodology: As for the research on teacher use of peer-pairing, case study research involving interviews and observation would be carried out initially. A survey instrument would then be developed based on the findings of the case studies.

Policy Implications: Based on the findings, schools would be able to provide guidance to teachers regarding their use of aides and/or would be able to better development training and materials to assist mainstream teachers who teach LEP students.

APPENDICES

Appendix A: Alphabetical Listing by Author of Studies Reviewed and References Cited

Appendix B: Summary of Studies: Chronological Listing

Appendix C: Overview of Methodologies in Federally Funded Research Studies

APPENDIX A:

Alphabetical Listing by Author of Studies Reviewed and References Cited

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APPENDIX B:

Summary of Studies:
Chronological Listing

APPENDIX B

This Appendix provides draft summaries of each study, including basic reference information, research objectives and methodology, a summary of the study approach and findings, and any recommendations or caveats/limitations noted in the study. The following explain abbreviations used in this appendix:

"APA" indicates whether reports include any findings related to Asian/Pacific American populations: Y = Yes; N = No.

"Findings" indicates study findings identified by the following categories: S = Student; T = Teacher; I = Instruction; and A = Administrative.

1.0 STUDY: BILINGUAL INSTRUCTIONAL FEATURES PLANNING STUDY

1.1 TITLE: Bilingual Instructional Features Planning Study: Working Definitions of Terms for the Bilingual Instructional Features Study (Planning Paper 1)

AUTHOR: Nieves-Squires, Sarah; Goodrich, Robert L.

YEAR: 1980 CONTRACT #: NIE400-79-0071

ORGANIZATION: Abt Associates, Inc.

APA: N FINDINGS: T, A

OBJECTIVES:

The objectives were to develop full working definitions for the terms "bilingual education", "consequences for children", "instructional features", "significant", and "model". The actual working definitions used for the Bilingual Instructional Features Planning Study (BIFS) were selected from the alternatives presented in this paper.

METHODOLOGY:

Two to three alternative meanings of each of the five terms to be defined were discussed, as well as the implications for the design of the instructional dimensions of the study.

SUMMARY:

This is a discussion of working definitions of terms for use in the Bilingual Instructional Features Study (BIFS). The terms discussed are "bilingual education', "consequences for children', "instructional features", "significant", and "model". Alternative definitions and the implications of each for the study design are presented.

12 TITLE: Bilingual Instructional Features Planning Study: A Bibliography of Significant Features in Bilingual Education Programs (Planning Paper 2)

AUTHOR: Nieves-Squires, Sarah; Bodinger-DeUriarte, Cristina; Goodrich, Robert; Barberena, Celia; Gomez, Ruth; Grun, L.C.; Lewis, C.J.; Salinas, E.;Trevino-Martinez, R.

YEAR: 1980 CONTRACT #: NIE400-79-0071

ORGANIZATION: Abt Associates, Inc.

APA: N FINDINGS: T,A,I

OBJECTIVES:

The purpose of this report was to identify what is already known about the significant instructional features of bilingual education programs, including costs. The results of this report were used in the planning of the Bilingual Instructional Features Planning Study (BIFS).

METHODOLOGY:

The methodology included a literature review which surveyed traditional (e.g. dissertations, books, articles) and "nontraditional" sources (handbooks, sourcebooks, pamphlets). A content analysis of the materials was then conducted.

SUMMARY:

This document, the second in a series of reports, presents an annotated bibliography of papers, articles, pamphlets and books relating to instructional features of bilingual education. The bibliography has been classified on the basis of a content analysis of the sources surveyed.

1.3 TITLE: Bilingual Instructional Features Planning Study: Planning Factors for Studies of Bilingual Instructional Features (Planning Paper 3)

AUTHOR: Goodrich, Robert L.; Leinhardt, Gaea; Cervenka, Edward; Llanes, Jose; Carrasco, Robert

YEAR: 1980 CONTRACT #: NIE400-79-0071

ORGANIZATION: Abt Associates, Inc.

APA: N FINDINGS: T, A, I

OBJECTIVES:

The purpose of this report was to identify and discuss factors that should be considered in planning bilingual education instructional features studies, to raise questions as to what should be studied and what specific research questions might be addressed, and to discuss the design considerations which arise from those questions.

METHODOLOGY:

The methodology included a survey of existing research methodologies and conversations with other researchers. The research factors that were considered included sample design (e.g., stratification, site selection, sample size and statistical power, sampling method) analytic studies (e.g., qualitative and quantitative paradigms, cultural/linguistic groups, linguistic proficiency, comparison groups, contextual effects, generalizability etc.); measurement issues (e.g., measurement techniques, measures of language proficiency and dominance); and management; organization; and phasing issues.

SUMMARY:

This report is the third in a series designed to assist in the planning of new research studies of instructional features of bilingual education. The intent of the report was to identify and discuss research design issues that should be considered in the planning of large and small scale studies.

1.4 TITLE: Bilingual Instructional Features Planning Study: Feasibility and Credibility of Bilingual Features Instructional Study Plans: Field Verification (Planning Paper 5)

AUTHOR: Goodrich, Robert; Nieves-Squires, Sarah; Bodinger-DeUriarte, Christina

YEAR: 1980 CONTRACT #: NIE400-79-0071

ORGANIZATION: Abt Associates, Inc.

APA: N FINDINGS: T, A, I

OBJECTIVES:

The objectives of this report were to assess the feasibility and credibility of the proposed Bilingual Instructional Features Study (BIFS).

METHODOLOGY:

The appropriateness of the study design was evaluated through a field verification process conducted in five sites: Los Angeles, New York City, Miami, Rough Rock, AZ, and Oakland, CA. Respondents were LEA and SEA personnel, school personnel, community people, and parents. 123 open ended interviews were conducted by local teams over a two week span during February, 1980. Responses were content-analyzed and tallies were prepared. A report prepared from these tallies included a description of the design and implementation of field verification, synthesis of responses, and implications of findings.

SUMMARY:

This report summarizes the results of 123 interviews conducted in five sites across the nation. The purpose of the investigation was to verify the credibility and acceptability of a set of working definition of terms and of various research designs previously considered (see Planning Papers 1 and 3 respectively). Most practitioners considered the definition of bilingual education to be closely tied to the role of two languages in the instruction of language minority LEP children. All respondents cited positive short and long-term consequences of bilingual education, including better attendance, economic success, and improved social relation. A few reported negative consequences, such as isolation from the mainstream. A number of features were regarded as significant for bilingual education. The three features emphasized by teachers and principals across the 5 sites were the teaching of ESL, maintenance, and teacher qualification.

CAVEATS/LIMITATIONS:

It was recommended that eight sites (one from each language/geographical stratum) be selected for the proposed study. No more than two full-time, on-site staff should be hired for each site.

20 STUDY: CASE STUDIES OF DELIVERY AND COST OF BILINGUAL EDUCATION

TITLE: Case Studies of Delivery and Cost of Bilingual Education

AUTHOR: Carpenter-Huffman, Polly; Samulon, Marta

YEAR: 1981 CONTRACT #: Rand N-1684-ED

ORGANIZATION: Rand

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The purpose of the study was to estimate cost to the nation's economy of regulations proposed in August, 1980, for bilingual programs. More specifically, the study focused on three questions fundamental to federal policy in bilingual education: How does provision of bilingual education vary among LEAs; why do these variations arise; how do these variations affect cost.

METHODOLOGY:

Methodology included selection of six LEA's that varied in size, program type, and LEP enrollments, in the Western United States (to save travel), and that had fairly well-established bilingual programs. Researchers conducted structured interviews with superintendents, bilingual program directors, budget directors, school principals, teachers, and aides in a random selection of 60 schools and about 150 teachers from lists provided by staff of bilingual programs. Programs in sample sites served speakers of Spanish, Asian-Pacific, and Russian languages. Descriptive analyses were conducted of service delivery models and related costs.

SUMMARY:

This report presented empirically based estimates of the added cost of bilingual education in six school districts located in the Western U.S.. Based on case studies of 60 schools, the report presents findings and problems related to the identification and assessment of language minority, limited English proficient students, bilingual and ESL programs and staffing, and funding of these programs. New methods derived from economic principles were used for computing added cost. At the sample sites, the total added cost of bilingual programs ranged from $200 to $700 per pupil. Between 50% to 70% of the added cost was accounted for by the added cost of instruction, and it depended strongly on the mode of delivery. Delivery procedures, in turn, depended on Local Education Agency (LEA) policy, numbers of LEP students, their primary languages, availability of staff, and enrollment trends. More data is needed to estimate the cost of bilingual programs nationwide.

RECOMMENDATIONS:

In computing added cost, the researchers recommended spreading added cost over all students in the classroom, not just the LEP students. Added cost should be estimated in five steps: estimate the total cost of education including the bilingual program for LEP and non-LEP students taken together; divide the total cost by the sum of LEP and non-LEP students to get the cost per student; estimate the total cost of education for the same number of students without the bilingual program (baseline cost); divide the baseline cost by the number of students; subtract the cost-per-student (step 4) from the cost-per-student (step 2) However, in the absence of a bonafide baseline cost, the procedure must be modified.

CAVEATS/LIMITATIONS:

Due to time and resource constraints the study did not use a nationally representative sample of the nation's bilingual programs, and it did not take full advantage of early study findings as the study progressed. There was no time to collect and analyze all potentially useful data in the larger LEAs. There was no bonafide baseline cost.

3.0 STUDY: A COMPARISON OF THE EFFECTS OF LANGUAGE BACKGROUND AND SOCIOECONOMIC STATUS ON ACHIEVEMENT AMONG ELEMENTARY SCHOOL STUDENTS

TITLE: A Comparison of the Effects of Language Background and Socioeconomic Status on Achievement Among Elementary School Student (Draft Final Report)

AUTHOR: Rosenthal, Alvin; Milne, Ann; Ginsburg, Alan; Baker, Keith

YEAR: 1981 CONTRACT #: 300-75-0332

ORGANIZATION: AUI Policy Research

APA: N FINDINGS: S,I

OBJECTIVES:

The objectives were to compare the relative effects of socioeconomic status (SES) variables and home language variables on achievement level and learning.

METHODOLOGY:

The methodology involved an analysis of data collected for the Sustaining Effects Study (SES). From the national SES sample, 15,000 students were selected for the sample. A regression analysis was done separately for math and reading for each grade based on achievement level and school-year learning.

SUMMARY:

This study compares the relative effects of socio-economic status variables and home language variables on achievement level and school learning or achievement change. Results in this draft final report indicate that socio-economic status had a much greater effect than home language background on educational achievement. In addition, differences in achievement level between low and high socio-economic status students was found to be much greater than the differences between English and non-English students. Thus, screening the home language background to identify students for services will produce little ultimate benefit.

CAVEATS/LIMITATIONS:

The study measured the effects of home language background on achievement, but did not investigate the relationship of the child's own language skills to achievement, which may find different results.

4.0 STUDY: EFFECTIVENESS OF BILINGUAL EDUCATION: A REVIEW OF THE LITERATURE

TITLE: Effectiveness of Bilingual Education: A Review of the Literature (Final Draft Report)

AUTHOR: Baker, Keith; de Kanter, Adriana

YEAR: 1981 CONTRACT #: None specified

ORGANIZATION: Office of Planning, Budget, and Evaluation (Department of Education)

APA: N FINDINGS: 1

OBJECTIVES:

The objectives were to review the language-minority research literature in relation to two questions: (1) does transitional bilingual education lead to better performance in English, and (2) does transitional bilingual education lead to better performance in nonlanguage subject areas.

METHODOLOGY:

An initial examination of more than 300 documents concerning bilingual education was carried out. Studies were included in the final review if they were true experiments with random assignment to treatment and control group or studies with non-random assignment which controlled for initial differences. Only 28 studies met the established criteria. Findings from these studies were organized by the comparisons they examined and aggregated by result (positive, negative, no difference).

SUMMARY:

This report explores the effectiveness of transitional bilingual education based on a review of the relevant research literature. Based on the review findings, the authors concluded that there is no firm empirical evidence supporting the effectiveness of Transitional Bilingual Education programs. They recommended that federal policy be flexible and allow schools to develop instructional programs which fit their needs.

RECOMMENDATIONS:

Several recommendations resulted from this review: 1. The federal government should not place exclusive reliance on Transitional Bilingual Education; 2. Federal policy should be flexible and allow school sites to develop instructional programs that suit them and their students. 3. Structured immersion demonstration programs should be funded and systematically evaluated; 4. Improved bilingual research and program evaluations are needed. The authors also suggested broadening the research agenda to include a) an examination of how language minority children's language deficiencies differ in their home language and English; b) an examination of the effectiveness of alternative instructional approaches and how they meet the needs of different types of language minority children; c) a re-examination of the theory of Transitional Bilingual Education; d) a formulation of structured immersion curricula; e) an examination of the methods used in English as a second language instruction; and an examination of the qualifications and degree of fluency of bilingual education teachers.

5.0 STUDY: ADDRESSING THE NEEDS OF LANGUAGE-MINORITY CHILDREN: ISSUES FOR FEDERAL POLICY

TITLE: Addressing the Needs of Language-Minority Children: Issues for Federal Policy (Final Draft)

AUTHOR: Birman, Beatrice F.; Ginsburg, Alan

YEAR: 1981 CONTRACT #: None specified

ORGANIZATION: Office of Planning, Budget, and Evaluation (Department of Education)

APA: N - FINDINGS: S,A,I

OBJECTIVES:

The objectives were to present an overview of issues raised by papers commissioned by the Office of Planning, Budget and Evaluation (OPBE) or written by its staff members.

METHODOLOGY:

Six studies in critical policy areas were examined in order to provide evidence on which to base a re-examination of the Federal policies to provide bilingual education to the exclusion of other approaches.

SUMMARY:

This report presents an analysis of issues raised by six papers commissioned by the Office of Planning, Budget, & Evaluation (OPBE), as well as other recent research. These studies examined critical policy areas in order to provide support and evidence for a re-examination of Federal policies. Overall, the research emphasizes the need to assess adequately the student's home language proficiency, and to explore alternative approaches to transitional bilingual education.

RECOMMENDATIONS:

The problems of language minority children are too complex to have one nationally mandated instructional approach. Transitional bilingual education should not be the sole approach encouraged by federal policy. States and school districts should have greater discretion to decide the type of special program most appropriate for them. The need exists for improved bilingual research and program evaluations.

6.0 STUDY: CHILDREN'S ENGLISH AND SERVICES STUDY

TITLE: Children's English and Services Study: Educational Needs Assessment for Language Minority Children With Limited English Proficiency

AUTHOR: O'Malley, J. Michael

YEAR: 1982 CONTRACT #: None specified

ORGANIZATION: InterAmerica Research Associates, Inc.

APA: N FINDINGS: S, A, I

OBJECTIVES:

The objectives of this report were to assess the educational needs of children with limited English proficiency and to improve the instructional services provided to them.

METHODOLOGY:

The methodology included an external review group composed of 30 staff representatives who established criteria to define limited English proficiency among language minorities and developed specifications to collect information on school services to language minority students. A test was specifically designed to determine LEP status and was given to children within households that were interviewed (household survey). Questionnaires were given to schools to identify educational needs (through the pupil survey). The sample was drawn to provide representative numbers of children in California, Texas, New York and in the remainder of the country. The student response rate in Texas was 10 percent and thus Texas was dropped from the analysis. The California student response rate was also low but sufficient for inclusion in the national analysis. No state analysis is reported.

SUMMARY:

The purpose of the report was to determine the educational needs of LEP children and the special services provided to them. Additionally, the study provided estimates of the numbers of LEP children speaking Spanish as a native language and aggregates of all other language minorities. The results, based on information on a sample of about 1,000 language minority LEPs, show that about one-third (34%) of limited English proficient children 5-14 years of age receive special instruction, including ESL and bilingual education. The evidence suggests that Federal- and State-supported bilingual education programs do not focus on maintaining the children's native language. For example, the percentage of LEP children receiving bilingual instruction decreased from grades K-6 (54%) to grades 7-9 (17%).

CAVEATS/LIMITATIONS:

The overall response rate on the pupil survey was low (67%). School-based identification assessment policies and procedures differed from that used in this study (i.e., from the test specifically designed for determining LEP status). These factors, along with the exclusion of Texas from data analysis, reduce the generalizability of the study.

7.0 STUDY: LIMITED ENGLISH PROFICIENT STUDENTS: A REVIEW OF NATIONAL ESTIMATES

TITLE: Limited-English Proficient Students: A Review of National Estimates

AUTHOR: Ulibarri, Daniel

YEAR: 1982 CONTRACT #: 00CA80-0001

ORGANIZATION: National Center for Bilingual Research

APA: N FINDINGS S

OBJECTIVES:

The objectives were to identify the reasons for the differences between estimates of the number of children in need of bilingual or special educational language services.

METHODOLOGY:

The review consisted of an examination of four recent studies containing estimates of the language minority and/or limited-English proficient children. The review includes a discussion of conceptual and operational definitions of the language minority LEP population and specific ways in which the four studies differed.

SUMMARY:

This report describes the results of a comparison of four studies which attempted to estimate the language minority population in United States schools. A review of these studies revealed that the discrepancies in findings were a product of differences in the underlying purposes, the definitions of the target populations, the methodologies, and the data bases used.

RECOMMENDATIONS:

Since estimates of the language minority LEP population are derived from different goals and methods, caution should be taken before accepting any one estimate for educational planning.

80 STUDY: A STUDY OF BILINGUAL INSTRUCTIONAL PRACTICES IN NONPUBLIC SCHOOLS

TITLE: A Study of Bilingual Instructional Practices in Nonpublic Schools

AUTHOR: Elford, George; Woodford, Protase

YEAR: 1982 CONTRACT #: 400-81-0040

ORGANIZATION: Educational Testing Service

APA: N FINDINGS: T,A,I

OBJECTIVES:

The objectives were to investigate bilingual education in non-public schools and to identify ways in which non-public schools serve the language learning needs of American youth.

METHODOLOGY:

Methodology included identifying non-public schools with effective bilingual programs from a multiple source approach, including a review of journals and newspapers, nominations from non-public school and bilingual education groups and agencies, nominations from the study's advisory committee, and through a series of regional idea-sharing sessions with non-public school bilingual educators. Site visits were conducted at 24 non-public schools selected on the basis of program characteristics, location, and sponsorship.

SUMMARY:

This study reports on a project investigating bilingual education in nonpublic schools. Using a broad definition of bilingual education and a case study approach, the project identified the range of bilingual instructional programs and apparently effective practices in nonpublic schools. The authors noted that three models (enrichment, submersion, and English as a Second Language) tended to characterize the private sector offerings in bilingual education. A bilingual education is not an important feature of most full-time private schools, and decisions about methods and materials are left largely to teachers. Bilingual services of nonpublic schools tended to follow patterns related to the different categories of schools such as parochial, Hebrew, and independent schools. They point out that support services for language instruction that are available in most public schools are not available in nonpublic schools. However, some private school educators are reluctant to accept, and perhaps become dependent on, federal assistance to support activities they value for fear it may be withdrawn.

RECOMMENDATIONS:

Researchers noted that if new and useful bilingual instructional practices are to develop in the private sector, attention must be given to linkages and resources that tend to make such developments possible. Direct government assistance to specialized language schools in the private sector would be feasible if secular private schools were not grouped with denominational schools. Substantive, positive information of the effectiveness of bilingual education must be released before it can be promoted in private schools.

CAVEATS/LIMITATIONS:

Researchers pointed out that generalizations from the study must be qualified became non-random procedures were used in school selections and the number of schools visited was small.

9.0 STUDY: EVALUATION OF THE IMPACT OF THE PART A ENTITLEMENT PROGRAM FUNDED UNDER TITLE IV OF THE INDIAN EDUCATION ACT

9.1 TITLE: Monograph 1: Academic Performance, Attendance, and Expectations of Indian Students in Public Schools

AUTHOR: Young, Malcolm; Hopstock, Paul (Eds.)

YEAR: 1983 CONTRACT #: 300-80-0862

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: I

OBJECTIVES:

Monograph 1 provided a detailed description of data collected on Native American student achievement and attendance. It is one of a series of documents which reports on the impact of the Title IV, Part A program of the Indian Education Act.

METHODOLOGY:

A stratified random sample of all Title IV, Part A projects in public school districts which had been operating 3 or more years and with 30 or more American Indian/ Alaska Native students were visited during 1981-1982 (115 projects). Detailed analyses of information on academic achievement were provided, including ratings by parents and teachers. School attendance and retention data were obtained from school records, principals, teachers, parents, students and project staff. Information of the knowledge and aspirations of post-secondary options and the post high school educational and employment activities of a sample of Indian high school students were also collected.

SUMMARY:

This monograph, one of a series of documents reporting on the impact of Part A of the Indian Education Act, describes data collected on Native American student achievement, attendance, and educational aspirations. Findings indicate that overall American Indian student attendance is consistent with the general population. Although programs were perceived as having an impact on attendance, substantial changes in attendance rates were not found. However, students who had been served by the Title IV, Part A project were more likely to have aspirations for post-secondary education. There were no clear findings concerning the impacts of Part A projects on achievement test scores; however, American Indian students scored below the means on standardized achievement tests in mathematics and reading.

CAVEATS/LIMITATIONS:

The data on post-high school activities of Indian students were not representative of the entire Indian population because a number of Indian students drop out before they reach the 10th grade.

9.2 TITLE: Monograph 2: The Cultural Instruction Component of Title IV, Part A Programs in Public Schools

AUTHOR: Reimer, John; Russell, Robert; Grimsley, Gary

YEAR: 1983 CONTRACT #: 300-80-0862

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: S,I

OBJECTIVES:

Monograph 2 provided a detailed description of data collected on Native American student cultural attitudes and knowledge. It is one of a series of documents which reports on the impact of the Title IV, Part A program of the Indian Education Act.

METHODOLOGY:

As part of a larger study evaluating the Title IV, Part A program, data were collected during the fall and spring of the 1981-82 school year from a stratified, random sample of all Part A projects in public school districts which had been operating 3 or more years and which had 3 or more American Indian/Alaska Native students. The data in this monograph are based on the 74 projects which had cultural instruction or activities components. The data were collected from local school administrators, project directors, project staff, parent committee members, public school principals, teachers, leaders in the Indian community, Indian students, and parents of Indian students. A variety of quantitative and qualitative procedures were used including questionnaires, interviews, and file reviews.

SUMMARY:

Monograph 2 describes the cultural instruction or activities component of the Part A Program and assesses their impact and relevancy in terms of satisfaction, appropriateness, and importance based upon the collective judgments of respondents representing the school districts, the Indian community, and American Indian students. Overall, findings indicated that Part A cultural instruction programs provided a variety of topics and activities on a regular basis throughout the school year. Although few (16%) of the districts had provided any cultural instruction or activities to Indian children prior to the local Part A program, the need for such programs was rated very important by many respondents. Community members and parents attributed student improvement in several areas to the program, including increased knowledge of, and pride in, Indian culture and heritage, and increased knowledge and skills in creative arts and crafts. One quarter (23%) of the parents surveyed thought their own knowledge of Indian culture had improved because of their local Part A project. Nearly one-half of the teachers involved in the programs had made revisions in their curricula to better reflect Indian history and cultural heritage.

10.0 STUDY: A DESCRIPTIVE STUDY OF THE CLASSROOM INSTRUCTION COMPONENT OF THE ESEA TITLE VII BILINGUAL EDUCATION PROGRAM

10.1 TITLE: Selected Case Histories: A Descriptive Study of the Classroom Instruction Component of the ESEA Title VII Bilingual Education Program

AUTHOR: Cardenas, Rene F.; Rudes, Blair A.

YEAR: 1983 CONTRACT #: 300-79-0675

ORGANIZATION: Development Associates, Inc.; Abt Associates, Inc.

APA: Y FINDINGS: I, A

OBJECTIVES:

The objectives were to describe the characteristics of a representative sample of Title VII-funded basic bilingual education projects; to identify groups of projects which appeared to represent distinctly different instructional approaches to the education of LEP children; to determine project objectives; to determine the relationship between skills addressed by the projects and those skills necessary to function effectively in an English-medium classroom in the United States; to determine the degree of program implementation among local education agencies; and to identify factors that enhance or impede project implementation.

METHODOLOGY:

The methodology included mailing questionnaires to project directors and Parent Advisory Committee (PAC) chairs. A representative sample (stratified random sample) of 60 sites serving grades K-6 was selected for site visits with intensive interviews with local and district personnel (superintendents, principals, project directors, federal program directors, federal program coordinators, teachers, teacher aides, parent advisory committee chairs). Out of the 60 sites selected, 18 case histories and 4 case studies were selected for this volume. Selection was based on the applicability to major objectives of the study, potential reference to several data topics of the Technical Report, and intrinsic interest. The case histories and case studies provide a context for interpreting the results from the study and provide examples from particular programs which illustrate these findings. They also illustrate particular program features which, while not correlated with specific study results, contribute to understanding the ways in which Title VII Bilingual Education programs are implemented. This volume includes 5 Asian language case histories which is out of proportion to the numbers, 2 mixed (Asian and Spanish), 13 Spanish, 3 Native American, and 1 Middle Eastern.

SUMMARY:

The case histories described in this report provide a context for the findings discussed in the other documents associated with the study. 22 individual projects selected from 60 case histories and six case studies are profiled. Topics covered in the analysis include instructional approach, parent/community involvement, adaptation to local contexts, innovative programs, materials development, coordination of special programs, and State Education Agency involvement. Findings suggest a correlation between ethnic/language groups and the instructional approach used. For example, programs serving mixed language groups showed a tendency toward a transitional or ESL approach. Case histories indicated that this tendency is a result of such pragmatic factors as the difficulty in finding adequate staff and materials for several language groups. In the area of parent/community involvement, findings indicated that when parents and community members believe that education is the purview of the schools, efforts to increase involvement are less successful. Additional findings suggest that diversity in program types and methodologies result from the adaptations of projects to the needs, wishes, and demographics of the local community.

10.2 TITLE: Technical Report: A Descriptive Study of the Classroom Instruction Component of the ESEA Title VII Bilingual Education Program

AUTHOR: Cardenas, Rene F.; Proper, Elizabeth C.; Goldsamt, Milton R.; Baltzell, Catherine P.; Cervenka, Edward J.; Day, Harry R.; Goodson, Barbara

YEAR: 1983 CONTRACT #: 300-79-0675

ORGANIZATION: Development Associates, Inc.; Abt Associates, Inc.

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The objectives were to describe the characteristics of a representative sample of Title VII-funded basic bilingual education projects; to identify groups of projects which appeared to represent distinctly different instructional approaches to the education of LEP children; to determine project objectives; to determine the relationship between skills addressed by the projects and those skills necessary to function effectively in an English-medium classroom in the United States; to determine the degree of program implementation among local education agencies; and to identify factors that enhance or impede project implementation.

METHODOLOGY:

Methodology included questionnaires mailed to all Title VII Basic project directors and to Parent Advisory Committee (PAC) chairs. A sample of 60 representative sites were visited, and intensive interviews were conducted with local and district personnel (superintendents, principals, project directors, federal program directors, federal program coordinators, teachers, teacher's aides, parent advisory committee chairs). Sites were selected with a stratifed random sampling procedure and were statistically representative of 401 projects serving grades K-6. The stratification variables included types of language, number of languages geographic region, total numbers of students received, and year of funding. Samples were drawn from a computerized data base containing all projects funded in 1980-81 (representing 524 local projects in United States and its territories). The mail questionnaire sought to gather detailed project-level descriptive information. The site visits/interviews focused on obtaining more detailed project-level information as well as school, grade, and individual (principal, teacher) level information. On-site documents were reviewed for additional information in the development of the case histories.

SUMMARY:

This report describes the characteristics of the classroom instructional component of Basic projects funded under the Elementary and Secondary Education Act (ESEA) Title VII Bilingual Education Program. The results of the study showed that in FY1980 there were 524 basic projects serving between 160,000 - 200,000 LEP children. Overall, project staff were qualified and experienced. 98% of the projects had Parent Advisory Committees. Instructional approaches, including language used for instruction, varied across projects; however 97% of the projects reported improved English language skills as one goal of instruction. The program has been only partially successful in terms of institutionalization at the local level, with Title VII remaining the primary source of funding for projects. Overall, the results suggest that the program is changing to meet new circumstances and types of students.

RECOMMENDATIONS:

Instructional approaches should be examined at the classroom and student levels. More staff training is needed, and more effective parent participation is needed in some projects.

11.0 STUDY: ESTIMATING THE NUMBER OF LANGUAGE MINORITY AND LIMITED ENGLISH PROFICIENT PERSONS IN THE U.S.

TITLE: Estimating the Number of Language Minority and Limited English Proficient Persons in the U.S.: A Comparative Analysis of the Studies

AUTHOR: Macias, Reynaldo F.; Spencer, Mary

YEAR: 1984 CONTRACT #: None specified

ORGANIZATION: National Center for Bilingual Research

APA: Y FINDINGS: S

OBJECTIVES:

The objectives were to analyze the reasons for discrepancies in estimates of the number of LEP children in six national studies and to clarify the implications of relying on one or the other of these estimates.

METHODOLOGY:

The research methodology includes reviews of the purpose, conceptualization, measures and measurement process, samples, and results of four data sets: (1) The Survey of Income and Education of 1976; (2) The Children's English and Services Study of 1978; (3) The Study of Sustaining Effects of Compensatory Education on Basic Skills; and (4) The Office of Civil Rights/ED Elementary and Secondary School Survey of 1978. In addition, 1980 census data and six reports from national studies based on the data sets were reviewed.

SUMMARY:

This study presents an analysis of the research approaches, methodologies, and results of six national studies that estimated the number of limited English proficient children. The six studies were compared and analyzed to determine the source of differences in estimates, and to outline the implications of relying on any one of the estimates.

RECOMMENDATIONS:

The recommendations were to inform policy makers that the estimate (and thus definition) they use to plan educational services will effectively include or exclude different children, to conduct a careful study describing the educational and social characteristics of children defined by one estimate versus another, and to do case studies of children with various characteristics used to define the populations so policymakers can qualitatively understand the implications of using one estimate over another.

12.0 STUDY: DEMOGRAPHIC PROJECTIONS OF NON-ENGLISH LANGUAGE BACKGROUND AND LIMITED ENGLISH PROFICIENT PERSONS IN THE U.S. TO THE YEAR 2000

12.1 TITLE: Changes in Numbers of Non-English Language Background and Limited English Proficient Persons in the United States to the Year 2000: The Projections and How They Were Made

AUTHOR: Oxford, Rebecca; Pol, Louis; Lopez, David; Stupp, Paul; Peng, Samuel; Gendell, Murray

YEAR: 1980 CONTRACT #: OE300-79-0737

ORGANIZATION: InterAmerica Research Associates, Inc.

APA: Y FINDINGS: S

OBJECTIVES:

The objectives were to project the numbers of non-English language background (NELB) and LEP persons in the U.S. to the year 1000; to provide detailed data on NELB and LEP persons in terms of nation, state, age and language and; to provide data which will be useful in planning educational programs involving significant numbers of NELB and LEP children, as well as adult and post-secondary programs.

METHODOLOGY:

The Cohort Component Prevalence Rate Method was used to project populations figures by age, language, and geographic area, using 1976 as a base year. To determine the number of LEPs, the non-English-language-background (NELB) population was first projected, then multiplied by the LEP to NELB ratio (LEP rates). LEP rates were calculated from findings from the Children's English Services Study (CESS) and the 1976 Survey of Income and Eduction (SIE). United States Census data was also used in some calculations.

SUMMARY:

Using 1976 as a base year, this report provides projections of non-English-language-background (NELB) and limited English proficient (LEP) persons in the United States until the year 2000. Breakdowns are presented by language, age, and state and geographic area. The NELB population was projected to increase from 28 million in 1976 to 39.5 million in the year 2000. Spanish language background persons were projected to increase in both absolute numbers and as a percentage of the total NELB population. Despite a temporary decline in 1980 and 1985, the overall number of LEP children, age 5 - 14, was expected to increase in the 24-year period. The proportion of Spanish language background LEP persons was also projected to increase from 71% in 1976 to 77% in the year 2000.

RECOMMENDATIONS:

Educational planners will need to find ways to meet the needs of the Spanish language background population while also providing for smaller, yet significant concentrations of other LEP students. New projections should be made using 1980 Census data, and should resolve some of the methodological problems which surfaced in this study.

CAVEATS/LIMITATIONS:

These data should be used with caution. Problems encountered by this projection effort included a lack of usable information about the immigrant and refugee population, an inability to differentiate growth rates and age structure of the base population by all relevant language groups, and use of a single set of Census Bureau population projections.

12.2 TITLE: Demographic Projections of Non-English Language Background and Limited- English-Proficient Persons in the United States to the Year 2000 by State, Age, and Language Group

AUTHOR: Oxford-Carpenter, Rebecca; Pol, Louis; Lopez, David; Stupp, Paul; Gendell, Murray; Peng, Samuel

YEAR: 1984 CONTRACT #: OE-300-79-0737

ORGANIZATION: InterAmerica Research Associates, Inc.

APA: Y FINDINGS: S

OBJECTIVES:

The purpose of this study was to make demographic projections of the U.S. Limited English Proficient population for the years 1980, 1985, 1990, 1995 and 2000 in 3 categories: age, language and state.

METHODOLOGY:

Demographic projections of the U.S. Limited English Proficient population to the year 2000 were derived from the total Non-English Language Background (NELB) population using 1976 as a base year. LEP rates (NELB-to-LEP ratios) were also determined for each language group. Four main data sources were used: the 1975 Current Population Survey-Survey of Languages Supplement (CPS-SLS), the 1976 Survey of Income and Education (SIE), the 1976 Children's English and Services Study (CESS), and the US Bureau of the Census population projections to the year 2000.

SUMMARY:

This report provides demographic projections of non-English-language-background (NELB) and limited English proficient (LEP) persons in the United States to the year 2000. Findings indicate that the number of NELB persons will steadily increase from 28 million in 1976 to 39.5 million in 2000. Spanish-language-background persons are projected to rise in both absolute numbers and as a percentage of the total NELB population, with a continued high concentration of NELB persons in California, New York and Texas. NELB children from ages 5-14 will equal 5.1 million by the year 2000 with temporary declines throughout the 1980s. The number of LEP students in this age group will also increase, especially in the Spanish and Asian groups. LEP rates are highest among Spanish, Vietnamese, and Navajo language groups.

RECOMMENDATIONS:

The expected increase in the number of school-age, Spanish language background limited English proficient persons in California and Texas has profound implications for the development of educational strategies and the allocation of programs and resources. In designing programs, however, administrators must also consider the needs of other limited English proficient groups. The very high limited English proficient rates among Vietnamese, Navajo, and Yiddish language groups, for example, may also have importance for educational planning.

CAVEATS/LIMITATIONS:

Due to the limitations of one of the data sources (CESS), projections for the LEP population were restricted to the 5-14 age group. Base population projections were also affected by the lack of usable or reliable information on immigrants and refugees.

13.0 STUDY: TEACHING READING TO BILINGUAL CHILDREN STUDY

13.1 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 1, Introduction)

AUTHOR: Mace-Matluck, Betty J.; Hoover, Wesley A.; Calfee, Robert C.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Education Development Laboratory

APA: N FINDINGS: I

OBJECTIVES:

This document served as an introduction to the "Teaching Reading to Bilingual Children Study" conducted from 1978-1984. The objectives of the study were to describe variations in both English and Spanish language ability of students living in bilingual communities, to document prevailing practices in reading instruction for bilingual students, and to investigate the relations between the instructional program and student achievement for students with differing entry profiles.

METHODOLOGY:

A literature review for the study included background on teaching, reading, and bilingual Hispanic children, focusing on numbers of LEPs, changing economics, schooling for language minority children, and federal legislation, regulations, and mandates. The introduction also presents an overview of the study.

SUMMARY:

This document, Volume 1 of a series, serves as an introduction to the "Teaching Reading to Bilingual Children Study" which was conducted 1987-1984. The purpose of the study was threefold: to describe variations in both English and Spanish language ability of students living in bilingual communities; to document prevailing practices in reading instruction for bilingual students; and to investigate the relations between the instructional program and student achievement for students with differing entry profiles. A description of the study and the study design are provided in this volume, along with a review of literature concerning the challenges, mandates, and need for teaching reading to bilingual children.

CAVEATS/LIMITATIONS:

Limited funding prevented full implementation of the study design for the four student cohorts (i.e. only 2 completely participated).

13.2 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 2, Design of the Study)

AUTHOR: Mace-Matluck, Betty J.; Hoover, Wesley A.; Calfee, Robert C.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Education Development Laboratory

APA: N FINDINGS: I

OBJECTIVES:

The purpose of this document was to describe the design of the "Teaching Reading to Bilingual Children Study" conducted from 1978-1984.

METHODOLOGY:

Methodology included a sample selection of more than 350 grades K-4 students from bilingual backgrounds or who were monolingual in English or Spanish upon entry to school. Twenty schools, 200 teachers, and 6 school districts (in Texas and Mexico) participated in the study. Students were chosen based on their language status and cognitive style. Language performance was assessed through oral proficiency tests (commercial and state approved); teacher ratings (SOLA-Student Operational Language Assessment scale); and audiotaped language samples. Reading assessment of progress was based on reading readiness measures (Stanford/Prueba) i.e. informal reading inventories; a reading achievement test (Interactive Reading Assessment System); and standardized achievement tests (CAT, ITBS, CTBS). Cognitive assessment was carried out with the Children's Embedded Figures Test (CEFT), the Matching Familiar Figures Tests (MFFT), and the Cartoon Conservation Scale (CCS). Instructional features were determined through teacher interviews (2); an inventory of bilingual instruction; a reading checklist (teacher instructional plan); and classroom observation (with the reading and Math Observation System (RAMOS). Teacher characteristics were determined through a survey of teachers' background and language skills, the Group Embedded Figures Test (GEFT); and the Matching Familiar Figures Test. Some students were tracked for 2 years while others participated for 4 years. The primary analysis of the data from the study aimed toward four basic outcomes: 1) class-level descriptions of the approaches used to teach reading to children from bilingual backgrounds; 2) descriptive information using validated precursor profiles typically found in bilingual children on entry to school; 3) development and validation of a set of longitudinal achievement indices that could be used to assess growth in the various components of reading for English and Spanish; and 4) development and validation of a set of procedures for measuring the linkage between reading achievement and precursor and instructional indices, taking into account the possibility of interactions between precursor profiles and response to the type of interaction.

SUMMARY:

This document describes the design of the "Teaching Reading to Bilingual Children Study". Specific features of the study design are discussed, including the theoretical rationale, design principles, data base, sample description (i.e. selection and characteristics), instrumentation and data collection, and data collectors.

13.3 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 3, Measurement of Growth)

AUTHOR: Calfee, Robert C.; Hoover, Wesley A.; Mace-Matluck, Betty J.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Education Development Laboratory

APA: N FINDINGS: I

OBJECTIVES:

The objectives were to review the concept of measurement of growth in reading achievement (i.e., changes in performance due to learning, development, or both), to review measurement methods used, to present linear growth track (i.e., as a means of summarizing the acquisition of reading skills), and to provide results from the Interactive Reading Assessment System.

METHODOLOGY:

The methodology included reviews of results from the Interactive Reading Assessment System (IRAS) along a linear growth track, which covers decoding, vocabulary, and comprehension. Using descriptive statistics and regression in the analysis of the data, this volume 1) summarizes patterns of growth in reading; 2) relates ancillary measures (language and prereading skills) to reading achievement; 3) describes the instructional program during the primary grades; and 4) examines the linkage between instruction and growth in achievement.

SUMMARY:

Volume 3 of the "Teaching Bilingual Children to Read" study focuses on measurement of growth in reading achievement. Results from student performance on the Interactive Reading Assessment Systems (IRAS) were analyzed along a linear growth track. The IRAS was specifically designed for this study and consists of a number of sub-tests focusing on decoding, vocabulary, and comprehension. Results showed that all groups made steady progress in decoding real words over the study years while the variability in individual performance increased over the years.

CAVEATS/LIMITATIONS:

The design of the IRAS is most secure at the primary levels (1-6). The fit of the IRAS design to existing basals is closest at the "word" and "sight word" level. The IRAS is limited at the more complex levels (i.e., pronunciation and meaning).

13.4 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 4, Oral Language Growth)

AUTHOR: Mace-Matluck, Betty J; Hoover, Wesley A.; Calfee, Robert C.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Education Development Laboratory

APA: N FINDINGS: S,I

OBJECTIVES:

The objectives of Volume 4 of the "Teaching Reading to Bilingual Children Study" were to focus on the language growth and development of a sample of bilingual students.

METHODOLOGY:

Language ability and language growth were assessed and monitored through oral language proficiency tests (the LAS, Spanish and English; BSM, and Woodcock, Spanish), teacher ratings (the Oral Language Proficiency Rating Scale), and audiotaped interactions/language samples (in the classroom and at home, and on the playground). Reliability analyses were carried out on all tests used. The researchers were knowledgeable of the limitations of the various measures and hazards involved in oral language assessment and employed multiple measures in an attempt to obtain a reasonably accurate index of each student's oral language abilities and patterns of language choice over time. Descriptive statistics and reliability coefficients were the methodologies used to analyze the data in this volume.

SUMMARY:

This document focuses on the oral language growth and development of a sample of students who were administered the Bilingual Syntax Measure at the kindergarten level and the Language Assessment Scales in subsequent years. Reliability and validity data on the oral proficiency measures used in the study were also analyzed. Across sites, students differed in their level of Spanish and English proficiency upon entry into school and their subsequent oral language growth. Overall, more progress was made in English language acquisition than in the development of Spanish skills.

RECOMMENDATIONS:

Further research is needed on effective means for assessing the oral language proficiency of young students.

13.5 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 5, Reading Growth)

AUTHOR: Hoover, Wesley A.; Calfee, Robert C.; Mace-Matluck, Betty J.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Education Development Laboratory

APA: N FINDINGS: S

OBJECTIVES:

The objectives were to investigate patterns of growth in reading achievement.

METHODOLOGY:

Multiple measures used for assessing reading components (vocabulary, decoding, text comprehension) included the Stanford Fundamental Skills Test (SFST) for reading readiness, and the Interactive Reading Assessment System (IRAS). Standardized reading achievement scores were collected yearly, and reading progress was monitored monthly through the Informal Reading Inventory. Bilingual students were rated on Spanish and English ability. Descriptive statistics, correlations and ANOVAS were used to analyze reading growth of the students.

SUMMARY:

This report investigates patterns of growth in reading achievement. Reading readiness measures indicated that bilingual children at entry to kindergarten generally come to school with sufficient skills to begin literacy acquisition. In other words, they are not academically disadvantaged. Reading achievement measures for bilingual children at 1st grade entry demonstrated that literacy development in English may be more readily transferable to Spanish than from Spanish to English. Findings also indicated a relationship between reading readiness and reading achievement. For example, knowledge of the English alphabet at entry to kindergarten was generally related to English literacy skills at 1st grade, and subsequent growth in decoding and reading acquisition. Knowledge of the Spanish alphabet was not as predictive. Substantial individual difference in the patterns of growth in both English and Spanish reading were evident.

13.6 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 6, Instruction)

AUTHOR: Hoover, Wesley A., Calfee, Robert C.; Mace-Matluck, Betty J.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Education Development Laboratory

APA: N FINDINGS: I

OBJECTIVES:

The objectives were to explain differences in reading growth in Spanish and in English and to investigate the role of instruction in individual differences in patterns of growth of reading in Spanish and English.

METHODOLOGY:

The methodology used included classroom observations (using the Reading and Mathematics Observation System and teacher checklists) and teacher interviews (including the Bilingual Classroom Questionnaire, the Inventory of Bilingual Instruction, and the Survey of Teachers' Background and Language Skills). This coordinated system employing classroom observations and teacher interviews was used to: 1) obtain detailed characterizations of the classroom instruction; 2) document the teachers'general instructional objectives; 3) describe the nature of the instructional program at both the school and classroom level; and 4) collect information on the teachers'background, training and language skills.

SUMMARY:

This report explains differences in reading growth in Spanish and in English by investigating the role of instruction in individual differences in patterns of reading growth. Aggregate data collected through classroom observations and teacher interviews indicated that instruction in Spanish and in English programs did not differ substantially. In both, teachers acted largely as facilitators and over the years, more group (versus independent) work was evident. Instruction in decoding and sentence/text meaning was generally non-explicit. Differences between planned English and Spanish instruction included time devoted to decoding and sentence/text meaning.

13.7 TITLE: Teaching Reading to Bilingual Children Study: Final Report (Volume 7, Language, Literacy, and Instruction: Integrating the Findings)

AUTHOR: Hoover, Wesley A.; Calfee, Robert C.; Mace-Matluck, Betty J.

YEAR: 1984 CONTRACT #: 400-83-0007

ORGANIZATION: Southwest Educational Development Laboratory

APA: N FINDINGS: I

OBJECTIVES:

The objectives were to explore and integrate the linkages between the different sources of information contained within the study and as described in Volumes 1-6.

METHODOLOGY:

This volume is devoted to assessing the degree to which various entry skills and instructional program indices can account for below average or average skill in each instructional year with respect to the reading skills (e.g., decoding, listening comprehension and reading comprehension) which were of primary interest. The primary goals of this analysis were to 1) determine the degree to which the several predictor indices (e.g. oral language classification, attendance, site, etc.) were consistently related to outcome variables (e.g., IRAS measures); and 2) evaluate the instructional patterns of any such relations.

SUMMARY:

This report explores and integrates the linkages between the different sources of information contained within the entire "Teaching Reading To Bilingual Children Study". Major findings were reported on reading readiness, oral language growth and pre-reading skills, instruction, and reading achievement as discussed in Volumes 1 through 6. Overall, students in the study were acquiring English oral language skills at the rate expected and slightly more than half of the students were reading in English at grade level expectations by the end of second grade.

CAVEATS/LIMITATIONS:

The programs observed varied considerably in character and extent and this may have influenced study results. In addition, longitudinal comparisons should be made with care because the study was truncated at the end of the year for the 3rd and major cohort. In other words, years 3 and 4 data were limited to a subset of sites.

14.0 STUDY: DESCRIPTIVE ANALYSIS OF TITLE VII-FUNDED STATE EDUCATION AGENCY ACTIVITIES

TITLE: Descriptive Analysis of Title VII-Funded State Education Agency Activities. Volume II: Nine Case Studies

AUTHOR: Nava, Hector; Reisner, Elizabeth R.; Douglas, Denise; Johnson, Donna M.; Morales, M. Frances; Tallmadge, G. Kasten; Gadsden, Vivian L.

YEAR: 1984 CONTRACT #: None specified

ORGANIZATION: SRA Technologies; Policy Studies Associates

APA: N FINDINGS: A,T

OBJECTIVES:

The objectives were to describe and analyze State Education Agency policies and activities regarding bilingual education, to describe and analyze the SEA level management structure which has been implemented as a result of Title VII grants to the SEA, and to provide information on technical management and assistance activities used by ED in assisting grantees.

METHODOLOGY:

The methods used to describe SEA activities included a review of the literature on bilingual education, a SEA grant application review, and case study analyses of nine State Education Agencies.

SUMMARY:

In general, the nine SEAs reported a high level of effectiveness in providing technical assistance to bilingual/ESL programs throughout their states, especially in the area of Title VII grant preparation. SEAs were most frustrated by changing student needs and the lack of resources to meet those needs. Additionally, many of the SEAs would like to institutionalize the services provided to LEP students by establishing state-mandated criteria for minimum services to LEP students as well as certification requirements for teachers of LEP students. Most of the SEAs would like to improve the level of communication and financial support that they receive from OBEMLA.

15.0 STUDY: BILINGUAL EDUCATION IN THE UNITED STATES PACIFIC ISLANDS

TITLE: Bilingual Education in the United States Pacific Islands

AUTHOR: Freese, Anne R.; Woltag, Susan N.

YEAR: 1984 CONTRACT #: None specified

ORGANIZATION: U.S. Human Resources Corporation

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

This was a descriptive study to provide background information on the U.S. Pacific Islands areas. It included a description of LEP students, a description of the (bilingual) instructional services, and a description of teacher characteristics and available capacity building resources at each site.

METHODOLOGY:

The research methodology included a literature review, interviews (with teachers, principals, ESEA Title VII personnel, educational directors, state officials, and parent advisory groups), informal conversations with persons knowledgeable about the Pacific Islands, and document reviews.

SUMMARY:

The Pacific Islands are geographically isolated and culturally and linguistically diverse. Almost all children speak English as a second language and most children receive instruction in their vernacular languages during the early years of elementary school. All children begin oral English instruction in the first grade. Teachers have varying degrees of proficiency in English, using the vernacular for instruction through grade 5, as part of the curriculum. Financial resources for special educational programs are limited by limited local tax bases, special populations, fixed educational costs, and higher overall costs than school systems in the mainland U.S. The Pacific Islands therefore rely quite heavily on federal financial assistance.

RECOMMENDATIONS:

The recommendations were to increase bilingual education in all regular programs, to consult with school districts that have adopted language policies, to establish a task force to review/revise long-range bilingual education planning (ie. public relations), and to provide assistance in and/or develop other areas, such as program monitoring and evaluation, and content area and language arts personnel. Other recommendations were to develop training, particularly ESL training, and the English skills of teachers; provide parent/community outreach; carry out research in cognitive and linguistic development of Pacific Island children; and assess teachers' English and native language skills.

CAVEATS/LIMITATIONS:

The limitations and caveats noted were that the study was limited in the number of participants surveyed. There was a 3-5 day limit on visits to each island. The lack of a uniform management, information and retrieval system operating across departments of education made it difficult to gather reliable figures on numbers of teachers and their language(s) proficiency and education levels. Information across the Islands could not be summarized because of the lack of a consistent management system.

16.0 STUDY: REVIEW OF THE STATE-OF-THE-ART OF EDUCATIONAL TECHNOLOGIES IMPLEMENTED IN PROGRAMS SERVING LEP STUDENTS FUNDED BY THE DEPARTMENT OF EDUCATION

TITLE: Review of the State-Of-The-Art of Educational Technologies Implemented in Programs Serving LEP Students Funded by the Department of Education: Final Report

AUTHOR: COMSIS Corporation

YEAR: 1984 CONTRACT #: 9-83-1-0529

ORGANIZATION: COMSIS Corporation

APA: N FINDINGS: A, I

OBJECTIVES:

The research objectives were to study the use of new technologies in bilingual programs funded by the ED by providing information that would permit ED management to better evaluate future funding requests. In addition, providing a base of experience upon which local school districts could build as they develop projects that use new technologies and providing information about factors that have helped/hindered the use of new technology in bilingual education to those who manage, administer, and provide bilingual education were goals of the study.

METHODOLOGY:

The research methodology included the evaluation of funding request documents for identifying projects that used a new technology in their instructional methodology. Project site visits, which included observation of the use of technologies and discussions with administrators, project staff, and teachers, were also carried out.

SUMMARY:

Video and computer technology were most often funded, followed by audio tape recorders or teaching machines. Results showed that video and computer technology can have a significant positive effect on LEPs. The bidirectionality of videotapes brought scarce teaching resources to geographically isolated students and brought real life situations into the classroom. Computers allowed students the flexibility to learn at their own pace. The major impediments to implementation of such technology include cost in the case of videos and, in the case of computers, lack of appropriate software and training.

RECOMMENDATIONS:

The recommendations were that educators must understand the strengths and limitations of technology as cost decreases and availability increases. They also need to understand that technology does not supplant the teacher.

17.0 STUDY: SELECTION PROCEDURES FOR IDENTIFYING STUDENTS IN NEED OF SPECIAL LANGUAGE SERVICES

17.1 TITLE: Selection Procedures for Identifying Students in Need of Special Language Services

AUTHOR: Pelavin, Sol H.; Fink, Linda; Celebuski, Carin A.; Crespo, Tom

YEAR: 1985 CONTRACT #: 300-84-0268

ORGANIZATION: Pelavin Associates, Inc.

APA: N FINDINGS: A

OBJECTIVES:

The objectives were to determine whether, and to what extent, different assessment procedures identify language minority populations as being in need of special language services (e.g., bilingual education), and to determine the effectiveness of procedures that are used to exit language minority students from special language programs and place them in English-medium classrooms.

METHODOLOGY:

A panel of advisory members for the study selected six school districts with language minority students to participate in the study. Two important criteria in the site selection were the ethnic/cultural background of the language minority student population, and the total number of LEP students per district. There were three data collection activities: selection of the sample of approximately 1,100 students entering and being assessed for language classification/placement; reclassification of the sample of approximately 1,100 students exiting into mainstream classrooms; and follow-up 6 months later when teachers of sampled students were asked if they agreed with the district's classification of students as LEP or not LEP. Assessment instruments included a composite of assessment measures used by participating districts plus The Shell Game. The composite measures included the Language Assessment Battery (LAB), Language Assessment Scales (LAS), a reading subtest from Comprehensive Test of Basic Skills (CTBS), and two innovative measures: the Minimum English Competency (MEC) Test, and the Shell Game (K-1). The Shell Game is a simulation of lessons on shells, audio-recorded and interactive, that assesses the ability to handle functions of English encountered in instruction.

SUMMARY:

This is the final report of a study of the selection procedures for identifying students in need of special language services. Based on data from 6 school districts with language minority students, the study considered methods of selection and reclassification of limited English proficient (LEP) students. Findings suggested that procedures using multiple indicators are better than using the results of a single test. However, at entry, the Language Assessment Scales (LAS) is almost as accurate as using multiple indicators. The Shell Game (a simulation of a lesson on shells) works very well for exiting younger students (K-1). A review of research on the selection and reclassification of students in need of special language services is included in the appendix.

17.2 TITLE: Selection Procedures for Identifying Students in Need of Special Language Services: Final Phase I Report

AUTHOR: Crespo, Orestes I.

YEAR: 1985 CONTRACT #: 300-84-0268

ORGANIZATION: Pelavin Associates, Inc.

APA: N FINDINGS: A

OBJECTIVES:

The objectives of this study were to integrate findings from Phase I data which included entry and exit procedures (i.e. selection and reclassification) currently in use, under development, or of potential use in special language programs; to determine the validity and reliability of the selection/exit components; and to determine how a variety of combinations of components identify different populations.

METHODOLOGY:

The research methodology of this study included a literature review and a review of existing data from personnel of multifunctional centers, SEAs, LEAs, and selected researchers. Additional data came from a research advisory panel providing viewpoints on technical and policy issues, a practitioner's panel providing a real-world perspective, and conference presentations focusing on past, current, and innovative selection and reclassification procedures.

SUMMARY:

The report presents a state-of-the-art review of current entry/exit procedures in special language programs such as bilingual education, English-as-a-second language, and immersion education. Data were provided on current processes of selection and reclassification, legislative and judicial influences, state requirements and recommendations for entry/exit procedures, and school district practices. The study also examined prior research focused on the use of standardized proficiency tests, innovative approaches, and time-on-task measures. Findings show that the variety of procedures used across states leads to differences in a student's eligibility for services and that ineffective selection procedures may not identify a student appropriately or may not correctly place the student. The study concludes that the onus of innovative and effective placement/exit procedures rests with the district.

18.0 STUDY: SIGNIFICANT BILINGUAL INSTRUCTIONAL FEATURES STUDY

18.1 TITLE: Significant Bilingual Instructional Features (SBIF) Study. Bilingual Instructional Perspectives: Organization of Bilingual Instruction in the Classrooms of the SBIF Study (Part 1 of the Study Report, Volume III.1)

AUTHOR: Fisher, Charles W.; Tikunoff, William J.; Ward, Beatrice A.; Gee, Elsie W.; Phillips, Mark L.

YEAR: 1981 CONTRACT #: NIE400-80-0026

ORGANIZATION: Far West Laboratory for Educational Research and Development

APA: Y FINDINGS: 1

OBJECTIVES:

The objective of this report was to describe the organization of instruction in a sample of successful bilingual instructional settings.

METHODOLOGY:

Qualitative and quantitative data were collected from 58 classrooms identified as "successful instructional settings", nominated by "constituents at each site", and based on subjective and objective criteria. Six national sites were visited and six ethno-linguistic groups (Chinese, Puerto Rican, Cuban, Mexican, Navajo, and hetero-lingual) were included in the data. Data sources included open-ended interviews, document reviews, informal and formal observations, language proficiency data, and checklists. Data collection focused on organizational structure of the classroom, allocation of instructional time, teacher variables, and student variables.

SUMMARY:

This report presents results of Part I of the Significant Bilingual Instructional Features Study. In this volume, organizational features of bilingual instruction considered significant in terms of their consequences for LEP students were described. The findings indicated some general trends in instructional organization. There was a strong emphasis on instruction in reading, language arts, and mathematics and extensive use of both the native language and English. English was used for approximately 60 percent of the average school day by students, teachers and aides. Students typically worked independently for over 90 percent of the day.

18.2 TITLE: Applying Significant Bilingual Instructional Features in the Classroom

AUTHOR: Tikunoff, William J.

YEAR: 1985 CONTRACT #: NIE 400-80-0026

ORGANIZATION: National Clearinghouse for Bilingual Education

APA: N FINDINGS: T,I

OBJECTIVES:

The purpose of the SBIF study was to identify those instructional features which are most successful in producing a positive learning experience for limited English proficient students. This document discusses how the successful features can be applied in the classroom by teachers of LEP students and how administrators can facilitate and support their implementation.

METHODOLOGY:

Findings from the Significant Bilingual Instructional Features (SBIF) Descriptive Study (1983) were integrated with information from other research that described and explained features of successful instruction for LEP students.

SUMMARY:

Five effective instructional features for LEP students were identified. These include clear communication in English and/or the students' native language, incorporating the student's culture into instruction, high expectations for students, integrating English language development with academic skill and development, and providing immediate feedback. These were discussed in terms of how they fit into the classroom environment and their implications for LEP students.

RECOMMENDATIONS:

Teachers and administrators should put into place those features of bilingual instruction identified by the SBIF study as successful (i.e., result in increased performance of LEP students in basic skill attainment). When estimating how much to use the native language or English, a number of instructional context issues should be considered, including the native language or English proficiency of the students, the number of languages represented in the class, and the content area. A teacher who does not speak the native language of the student can still be effective by using assistants or aides as translators, integrating English language instruction into content areas, and employing other strategies known to be effective in teaching English.

190 STUDY: SYNTHESIS OF ED-FUNDED RESEARCH ON MAJOR ISSUES IN BILINGUAL EDUCATION

TITLE: Synthesis of ED-Funded Research on Major Issues in Bilingual Education

AUTHOR: Pelavin Associates, Inc.

YEAR: 1985 CONTRACT #: None specified

ORGANIZATION: Pelavin Associates, Inc.

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The objectives were to provide a synthesis of studies funded by the U.S. Department of Education from 1973-1983 which focused on assessment of the national needs for bilingual education (numbers of LEP students, numbers of teachers needed), improvement in the effectiveness of services for students (nature, extent, and cost of current services), and improvement in Title VII program management and operations (evaluations of Title VII funded projects such as fellowships and preservice/inservice training).

METHODOLOGY:

The methodology included a review of studies such as national surveys, census data bases, and descriptive studies. Major issues addressed in these studies included classrooms and communities, literacy and mathematics studies, and evaluation of technical assistance and program management strategies.

SUMMARY:

This report presents a review and analysis of studies funded by the U.S. Department of Education, Title VII Bilingual Education Part C Research Program during 1973-1983. Studies included in the synthesis concerned services to LEP students, effectiveness of Title VII/Bilingual Education services, definitions of "language proficiency" for assessmen purposes, estimates of the numbers of LEP children, and numbers of qualified bilingual education teachers across the U.S.

20.0 STUDY: REVIEW, SUMMARY, AND SYNTHESIS OF LITERATURE ON ENGLISH AS A SECOND LANGUAGE

TITLE: A Synthesis of Current Literature on English as a Second Language: Issues for Educational Policy

AUTHOR: Chamot, Anna U.; Stewner-Manzanares, Gloria

YEAR: 1985 CONTRACT #: 300-84-0166

ORGANIZATION: InterAmerica Research Associates

APA: N FINDINGS: I

OBJECTIVES:

The objective was to synthesize the information summarized in earlier (Review and Summary) parts of the study and to address policy issues for different age and grade levels of students receiving ESL instruction in U.S. public schools.

METHODOLOGY:

All data are based on two previous reports within the same study. One is a review of current literature on ESL which identified recent documents on ESL instructional approaches, organizational patterns, and instructional materials used in US elementary and high schools, and language learning theories. The other is a summary of the literature review, supplemented with information from interviews with ESL specialists.

SUMMARY:

Results showed that the benefits of instructional objectives differ based on grade level, instructional objectives, and underlying language learning theories. District demographics, native language use, and the degree of integration of LEP students and services into the mainstream curriculum were found to influence the effectiveness of instructional services. In addition, few student characteristics were found to have been addressed by instructional approaches, different cognitive styles, or different language learning theories.

RECOMMENDATIONS:

This report recommended that a national descriptive study of ESL services in elementary and high schools and educational benefits of ESL services be carried out. The development and testing of additional ESL approaches and instructional materials was also advocated, as well as a comparison of the effectiveness of different ESL models.

21.0 STUDY: THE NATIONAL LONGITUDINAL EVALUATION OF THE EFFECTIVENESS OF SERVICES FOR LANGUAGE MINORITY LIMITED ENGLISH PROFICIENT STUDENTS

21.1 TITLE: LEP Students: Characteristics and School Services. Descriptive Phase Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students

AUTHOR: Young, Malcolm B.; Shaycoft, Marion F.; Hopstock, Paul J.; Zehler, Annette M.; Ratner, Mitchell S.; Rivera, Charlene; Rudes, Blair A.

YEAR: 1984 CONTRACT #: 300-83-0300

ORGANIZATION: Development Associates, Inc.; Research Triangle Institute

APA: Y FINDINGS: S,T,I

OBJECTIVES:

The objectives were to develop a comprehensive data base of descriptive information on the range of services (regardless of funding sources) which (K-6) elementary level language minority LEP students are provided in public schools. In addition, the goals were to estimate the number of language minority LEP students and the number provided with special language services in grades K-6, to describe characteristics of LM-LEP students provided instructional services, to identify and describe home/community characteristics for each major language group, to determine entry/exit criteria used by schools/districts, to determine the relationships between services offered to language minority LEPs and mainstream students, to identify clusters of instructional services for language minority LEPs in K-6, to obtain information useful in designing a longitudinal evaluation of the differential effectiveness of the identified clusters of services to language minority LEPs, and to lay a foundation for Phase II research on the longitudinal evaluation of the effectiveness of services.

METHODOLOGY:

The methodology used was a four stage sample design from states to districts/counties, to schools and to teachers and students. Questionnaires (on school district services, school characteristics, teacher and student instructional information, and student background) and interviews (on school services with the principal or LEP/language minority coordinator, and with the LEA testing coordinator) were carried out by mail and telephone. Site visits were also carried out. The study focused on grades one and three.

SUMMARY:

The purpose of this report was to develop a comprehensive database of information describing the range of services, (regardless of source of funding) which K-6 elementary Language Minority, Limited English Proficient (LM/LEP) students are provided in public schools. Data collection included the use of questionnaires, interviews, document reviews and site visits. Data were obtained on numbers of students, on the services provided, on student and home characteristics, entry and exit criteria, and teacher characteristics. Five types of instructional "clusters of services" and the numbers of students receiving each service cluster were identified.

CAVEATS/LIMITATIONS:

The study reported that definitions of language minority LEP students vary across states, districts and schools, yet used the local, operational definition of LEP for each study participant. Findings focused on special instructional services provided in grades 1-5 even though data on characteristics of LM-LEP students were limited to grades 1 and 3 and were obtained from a small sample.

21.2 TITLE: Instructing Children With Limited English Ability: Year One Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language- Minority, Limited English Proficient Students.

AUTHOR: Development Associates, Inc.; Research Triangle Institute

YEAR: 1986 CONTRACT #: 300-83-0300

ORGANIZATION: Development Associates, Inc.; Research Triangle Institute

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The objectives of this study were to understand the degree to which educational services to language minority, limited English proficient students in grades 1-5 are effective in assisting these students to function in all-English-medium classrooms and to determine which clusters of services are most effective under specific conditions.

METHODOLOGY:

The methodology used in the study involved on-site survey data collection in 18 school districts (86 schools). Students in grades 1 and 3 were used for sampling purposes and were grouped into three categories for analysis purposes (Spanish, Chinese, and other language groups). Data were collected by means of questionnaires and record reviews to obtain information on services, instructional staff, LEP policies/procedures, and student and parent/home information. Forms were filled out on school policies and procedures, student/teacher data, and student performance. The Student Oral Proficiency Rating (SOPR) was used to measure language proficiency; the SAT was used as a measure of achievement and the Raven served as a measure of aptitude.

SUMMARY:

Findings from the Year One data indicated that significant differences exist between the Spanish, Chinese, and other language groups with regard to parental presence in the home, socioeconomic status, language use at home, time on homework, conversations about school, and parental expectations of the child's educational achievements. Language group differences were also evident in characteristics of the students within these language groups. Schools were found to differ greatly on their academic climate, general characteristics, teacher training on LEP instructional strategies, administrative involvement, community attitudes, and entry and exit procedures. The instruction and teaching staff also differed by student language background.

22.0 STUDY: ALTERNATIVE INSERVICE STAFF DEVELOPMENT APPROACHES

22.1 TITLE: A Study of Alternative Inservice Staff Development Approaches for School Districts Serving Minority Language/Limited English Proficient Students. Planning Inservice Staff Development Programs: A Practical Manual for Educators.

AUTHOR: Arawak Consulting Corporation

YEAR: 1986 CONTRACT #: None specified

ORGANIZATION: Arawak Consulting Corporation

APA: N FINDINGS: T

OBJECTIVES:

The purpose of this manual was to serve as a guide for bilingual education staff attempting to implement new inservice training programs or to improve already existing ones. The manual provides a step-by-step, "how-to" guide for program implementation.

METHODOLOGY:

This manual was based on a review of literature on inservice and staff development to identify features important to the successful planning, implementation, and evaluation of inservice programs. Following the literature review, an examination of the features of inservice training programs in nine school districts with experience (and additional districts without experience) in implementing systematically planned inservice programs was conducted. Twenty-one school districts were visited for data collection.

SUMMARY:

Findings suggest that planning of an inservice staff program should begin by first determining the extent of community and school support for the program and by deciding who will be involved in the decision-making structure. The actual planning of a program was found to include seven activities: assessing staff training needs, identifying available resources, determining the type of inservice to be provided, setting training objectives, scheduling training activities and planning incentives, planning follow-up, and developing evaluation strategies.

22.2 TITLE: A Study of Alternative Inservice Staff Development Approaches for Local Education Agencies Serving Minority Language/Limited English Proficient Students: A Model of Inservice Approaches. Executive Summary (Final)

AUTHOR: Arawak Consulting Corporation

YEAR: 1986 CONTRACT #: None specified

ORGANIZATION: Arawak Consulting Corporation

APA: N FINDINGS: T

OBJECTIVES:

The objectives of this three-year study were to generate field-based descriptions of inservice staff development approaches applicable in Local Education Agencies serving Minority Language/Limited English Proficient students at the elementary and secondary levels, and to field-test those approaches in a selected number of LEAs.

METHODOLOGY:

The field-testing included three parts. During Part I, a working model of staff development approaches was developed from data collected from nine Local Education Agencies(LEAs). Each LEA had at least two years of experience operating a bilingual program, a Title VII grant, and an organized inservice program for staff serving Minority Language/Limited English Proficient students. The working model generated in Part I was refined during Part II, using a second set of nine LEAs. During Part III, the inservice model developed in Part II was further revised into five inservice modes with the help of a third set of nine LEAs.

SUMMARY:

Over a three-year period an inservice model of staff development approaches was developed from data collected from 27 LEAs. The final model included five modes of inservice delivery: in-house inservice through classroom visits; in-house inservice through group sessions; consultant workshop series; classroom visits by outside experts; and college or university courses. The advantages of each mode and the keys to their success were also reviewed.

RECOMMENDATIONS:

OBEMLA should sponsor training for school district personnel regarding the planning, implementation, and evaluation of inservice programs for staff serving minority language/limited English proficient students. OBEMLA should require Title VII first and second-year applicants to allocate a designated amount of their grants to educating staff who serve minority language/limited English proficient students. OBEMLA should require all Title VII school districts to submit yearly detailed staff development plans. The findings from this study should be disseminated to the Bilingual Education Multifunctional Support Centers. Finally, the specific advantages and costs associated with each mode should be considered when choosing a delivery method.

22.3 TITLE: A Study of Alternative Inservice Staff Development Approaches for Local Education Agencies Serving Minority Language/Limited English Proficient Students: Synthesis Report (Final)

AUTHOR: Arawak Consulting Corporation

YEAR: 1986 CONTRACT #: None specified

ORGANIZATION: Arawak Consulting Corporation

APA: N FINDINGS: T

OBJECTIVES:

The objectives of this report were to generate field-based descriptions of inservice staff development approaches applicable to LEAs serving minority language/LEP students at elementary and secondary levels and to field test the inservice staff development approaches in a selected number of LEAs serving minority language/LEP students. This was a three-part study which included (1) developing a matrix; (2) pilot-testing the working model and refining it; and (3) implementing and analyzing the impact of the inservice modes.

METHODOLOGY:

The methods used for this report included site visits to nine LEAs to generate a matrix of inservice staff development approaches. The matrix was then pilot-tested with nine additional LEAs in order to refine and revise the matrix. Sites were selected through a Title VII file review and nominations by OBEMLA staff. On-site data collection included interviews with bilingual program personnel, reviews of supporting documents, and observations of inservice activities. A literature review was also carried out on inservice and staff development to identify features leading to successful planning, implementation, and evaluation of inservice programs.

SUMMARY:

The delivery of inservice training was primarily influenced by the source of inservice (i.e. internal or external experts) and the form of training (i.e. classroom visits, workshops). Five modes of inservice training were identified through the study. These include in-house training through classroom visits, in-house training through group sessions, series of workshops given by consultants, or college/university courses. The advantages of each mode, as well as the factors influencing the success of the training, are explored.

RECOMMENDATIONS:

OBEMLA should sponsor seminars/training institutes to disseminate technical information on the planning, implementation and evaluation of inservice programs for staff serving LM/LEP students. First and second year Title VII applicants should be required to allocate a minimum of total grant requests to inservice staff development. OBEMLA should also require annual staff development plans from Title VII funded school districts and disseminate findings of this report to Bilingual Education Multifunctional Support Centers.

23.0 NOT USED

24.0 STUDY: BILINGUAL EDUCATION: A NEW LOOK AT THE RESEARCH EVIDENCE

TITLE: Bilingual Education: A New Look at the Research Evidence

AUTHOR: U.S. General Accounting Office

YEAR: 1987 CONTRACT #: None specified

ORGANIZATION: U.S. General Accounting Office

APA: N FINDINGS: I

OBJECTIVES:

The objectives of this report were to assess whether the research on bilingual education supports the requirement under the Bilingual Education Act that most projects must use the children's native language. The report was undertaken in response to a Department of Education proposal to eliminate the native-language teaching requirement from the act.

METHODOLOGY:

Specific Department of Education statements on bilingual education between 1983-1986 were reviewed, and instances supporting proposed changes in law were identified. Ten experts with diverse viewpoints on bilingual education and social science were selected to review the 31 department statements, and a collection of research reviews and summaries. Each expert was also asked to complete a questionnaire with six specific questions on the match between research on language learning and statements by department officials.

SUMMARY:

In this report, the General Accounting Office (GAO) assessed the validity of statements made by Department of Education officials about how to teach children with limited English proficiency. The position of the Department of Education was that a requirement of native language teaching be dropped from the Bilingual Education Act. The Department claimed that findings of research in this area are inconclusive. At issue were the Departments' interpretations of the body of research findings pertinent to the native language requirement. Based on judgments provided by a panel of 10 experts, the GAO found that there was little agreement with the Department of Education statements. Although experts noted the weakness of some parts of the overall body of research in this field, and suggested ways of strengthening it, they generally agreed that there was adequate and reliable evidence to reach conclusions about the research basis for the legal requirement for native language teaching. The GAO noted that the Department of Education rejected the findings of this report.

CAVEATS/LIMITATIONS:

Reliance on experts was both a strength and a weakness. The strength lay in the quality, diversity and representativeness of the group. The weakness was that a group of some other composition may have given different assessments. It is possible that the study was limited by the use of existing reviews of the research literature because reviews may contain biases that are hard to detect. However, the method was responsive to the Committee on Education and Labor's request for quickly developing information. Department of Education Officials objected to the draft of the report, saying its position on bilingual education was misrepresented, and they rejected the findings in general.

25.0 STUDY: EFFECTIVE COMPENSATORY EDUCATION SOURCEBOOK

TITLE: Effective Compensatory Education Sourcebook, Volume III, Project Profiles

AUTHOR: Alexander, Dorothy L.; Cotton, Kathleen J.; Griswold, Margaret M.; Estes, Gary D.

YEAR: 1987 CONTRACT #: None specified

ORGANIZATION: Northwest Regional Educational Laboratory

APA: N FINDINGS: A,I

OBJECTIVES:

The purpose of this sourcebook, the third in a series, was to present descriptions of Chapter 1 projects which have been found to be particularly successful in educating disadvantaged students.

METHODOLOGY:

Nominations were solicited by the U.S. Department of Education from all fifty State Educational Agencies, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs. Each nominated project submitted demographic information, data on program attributes, indicators of achievement, and descriptions of the projects. A panel of educational experts examined the nominations and summarized their ratings and comments.

SUMMARY:

Profiles were developed on 130 Chapter 1 programs which were recognized for their achievements by the U.S. Department of Education in 1986. Each project used instructional processes and organizational strategies that were supported by research as being effective in improving student performance. Effective instructional strategies included using appropriate methods, materials, and approaches; close monitoring of student progress; high expectations for student learning and behavior; and regular feedback and reinforcement.
Organizational attributes associated with success included clear project goals and objectives, professional development and training, parent and community involvement, and a positive school and classroom environment.

26.0 STUDY: BILINGUAL EDUCATION EVALUATION SYSTEM

26.1 TITLE: Evaluation of Bilingual Education Programs for Language-Minority, Limited- English-Proficient Students: A Status Report with Recommendations for Future Development (Phase 1 Report)

AUTHOR: Tallmadge, G. K., Lam, Tony C.M.; Gamel, Nona N.

YEAR: 1987 CONTRACT #: 300-85-0140

ORGANIZATION: RMC Research Corporation

APA: N FINDINGS: A

OBJECTIVES:

The purpose of this report was to summarize the state-of-the-art in bilingual education program evaluation in the United States and to improve the quality of local Title VII project evaluations by developing a system of procedures and materials for determining their impact on student achievement.

METHODOLOGY:

The research methodology combined an examination of the quality of current practices in bilingual education evaluation with a systematic identification of the desired characteristics of an evaluation system for bilingual education through consultation of literature on bilingual education and evaluation.

SUMMARY:

The report presents guidelines for maximizing validity, documenting program and student characteristics, and comparing the effectiveness of programs. The findings suggest that various factors, such as state and federal policy, local program administration, the evaluator's knowledge and competence, and the unique characteristics of bilingual programs ultimately affect the technical quality of evaluation practices. The report concludes that efforts thus far to improve the quality of evaluation research have been largely unsuccessful due to the poor quality and limited dissemination of materials.

RECOMMENDATIONS:

The authors recommended that the knowledge base of bilingual education evaluation methodologies should be expanded by incorporating and refining existing studies. The User's Guide should be revised so that it provides clear, step-by-step information. Also, an effective delivery system should be developed for dissemination and evaluation of research findings.

CAVEATS/LIMITATIONS:

Changes in local, state, and Federal policy will be required before significant changes can be made in bilingual education evaluation.

26.2 TITLE: Bilingual Education Evaluation System: Users' Guide, Volume 1, Recommended Procedures

AUTHOR: Tallmadge, G. Kasten; Lam, Tony C.M.; Gamel, Nona N.

YEAR: 1987 CONTRACT #: 300-85-0140

ORGANIZATION: RMC Research Corporation

APA: N FINDINGS: A

OBJECTIVES:

The objectives for developing the Bilingual Education Evaluation System (BEES) were to develop an evaluation system which would reflect the information gained from previous work in bilingual education evaluation, a system useful at the local level for purposes of project improvement, and a system totally responsive to current federal legislation and regulations governing evaluation of Title VII projects. The User's Guide was developed to assist in implementing and using the BEES. Volume 1 contains and describes the procedures and practices for the BEES.

METHODOLOGY:

The literature review on bilingual education evaluation which was carried out for developing the BEES served as background for the development of this document.

SUMMARY:

This User's Guide served as a guidebook for the use of the Bilingual Education Evaluation System (BEES). Nine major steps were described for using the BEES. These included assuring the project is evaluable, planning the evaluation, documenting program processes, selecting/adapting/developing instruments for assessing student outcomes, collecting outcome data, implementing an outcome evaluation design, processing and analyzing data, integrating and interpreting results, and preparing evaluation reports.

26.3 TITLE: Abbreviated Recommendations for Meeting Title VII Evaluation Requirements

AUTHOR: Lam, Tony C.M.; Gamel, Nona N.

YEAR: 1987 CONTRACT #: 300-85-0140

ORGANIZATION: RMC Research Corporation

APA: N FINDINGS: A

OBJECTIVES:

This report presented the general requirements and standards for completing an annual evaluation of a project that was funded under Part A of Title VII and provided recommendations for meeting each requirement. It is an abridged version of Volume 1, User's Guide.

METHODOLOGY:

The Bilingual Education Evaluation System (BEES), User's Guide, Volume 1, was reviewed and simplified into a version for practitioners.

SUMMARY:

In a simplified format, this report presents the general criteria for completing annual evaluations of projects that are funded under Part A of Title VII, along with recommendations for meeting each requirement. The report is divided into two parts. In Part 1, the evaluation requirements specified in the June 19, 1986 Bilingual Education Regulations are listed. Part 2 provides suggestions for meeting each requirement, including guidelines on defining participants, collecting data, and design and implementation of the evaluation.

RECOMMENDATIONS:

Recommendations include obtaining expert help in designing the evaluation and collecting data on background characteristics from all project participants before assessment, and then continuing to collect this information often. Project participants should be defined as all students who have participated in the project for 100 days or more. Tests that match the curriculum and are of appropriate difficulty levels should also be used. The gap-reduction design was suggested as a measurement of educational progress. More than one type of test should be used to measure academic achievement, and students should be prepared to take tests. Independent, trained test administrators and independent analysts should also be used.

27 0 STUDY: REVIEW OF THE BILINGUAL EDUCATION MULTIFUNCTIONAL SUPPORT CENTERS

TITLE: Review of the Bilingual Education Multifunctional Support Centers (BEMSC)

AUTHOR: Kutner, Mark A ; Pelavin, Sol A

YEAR: 1987 CONTRACT #: None specified

ORGANIZATION: Pelavin Associates, Inc.

APA: N FINDINGS: A,T

OBJECTIVES:

The objectives were to provide a detailed description of the nature of BEMSC training and technical assistance services, and the characteristics of individuals and school districts receiving services. In addition, detailed information was provided on the sponsoring organizations which operate BEMSCs, the organizational structure of BEMSCs and their staffing patterns, BEMSCs contract levels and expenditures, content and quality of BEMSC training, and technical assistance, coordination, and information dissemination services.

METHODOLOGY:

Research methodology included BEMSC document and data file review, interviews with BEMSC staff, and site visits to 11 of the 13 BEMSCs. Telephone calls, mail contact, and ED records were used for the remaining BEMSCs which were not visited.

SUMMARY:

The results indicate that the BEMSCs have been quite successful in delivering training and technical assistance to a large number of clients in a cost-efficient manner. Title VII school districts, and teachers within these districts, are the most frequent recipients of services. BEMSC training and technical assistance are not duplicative of other federally-funded service entities.

RECOMMENDATIONS:

BEMSCs could operate even more efficiently if staff time was used to emphasize the delivery of services rather than to carry out administrative duties.

28.0 STUDY: ACADEMIC LANGUAGE TALK: SIGNIFICANT FEATURES IN THE RESPONSES OF EFFECTIVE COMMUNICATORS

TITLE: Helping Limited English Proficient Children Communicate in the Classroom (A Handbook for Teachers)

AUTHOR: Simich-Dudgeon, Carmen, McCreedy, Lynn, Schleppergrell, Mary

YEAR: 1988 CONTRACT #: 300-86-0069

ORGANIZATION: National Clearinghouse for Bilingual Education

APA: N FINDINGS: I

OBJECTIVES:

The objectives of this handbook were to provide a resource for teachers who want to integrate LEP students more fully into the verbal interaction in the classroom.

METHODOLOGY:

The three-year "Academic Language Talk" study identified significant features in the responses of 3rd and 6th grade students who were successful communicators, and translated these findings into teacher strategies to promote language and cognitive development. For this handbook, short "capsules" were developed which summarize the research results and present suggestions for classroom use.

SUMMARY:

This handbook is a resource for teachers who want to integrate limited English Proficient (LEP) students more fully into the ongoing verbal interaction in the classroom. It highlights issues related to the verbal participation of LEP students and provides suggestions for encouraging them and helping them improve their oral skills. The ideas in the handbook constitute applied findings which resulted from the "Academic Language Talk" study to identify significant features in the responses of "successful communicators/responders" during academic verbal interaction. The handbook consists of 19 "capsules", each summarizing research results and presenting suggestions for classroom use.

RECOMMENDATIONS:

It was recommended that teachers avoid fill in the blank questions and give students more time to think through challenging questions.

29.0 STUDY: RESOURCE COMPENDIUM OF ASSESSMENT INSTRUMENTS WHICH CAN BE USED TO HELP SCHOOLS IN THE EDUCATION OF LEP STUDENTS

TITLE: A Resource Compendium of Assessment Instruments Which Can be Used to Help Schools In the Education of LEP Students

AUTHOR: Iribarren, Norma

YEAR: 1988 CONTRACT #: 300-86-0050

ORGANIZATION: Upper Great Lakes Multifunctional Resource Center

APA: N FINDINGS: A

OBJECTIVES:

This report provided an annotated bibliography of commonly used assessment tests that are designed for limited English proficient students from pre-school through adult.

METHODOLOGY:

Fifty-nine assessment instruments were reviewed for reliability, validity, and equity. This report includes a brief description of each test, the targeted grade levels, the amount of time suggested for administration, the type of administration, and the languages assessed.

SUMMARY:

Five categories of assessment tests commonly used in bilingual educational settings were included in the bibliography. These categories are achievement, language proficiency, vocational goal inventories, and personality inventories.

RECOMMENDATIONS:

There is no instrument which is 100 percent reliable and tailored to the individual LEP student so additional measures should be utilized, such as interviews, observations, and conversations. The most reliable results can be obtained by using a combination of measures.

30.0 STUDY: THE NATIONAL EVALUATION OF SERVICES FOR LIMITED ENGLISH PROFICIENT NATIVE AMERICAN STUDENTS

30.1 TITLE: Instructional Services for Native American Students with Limited English Proficiency: Year One Report of the National Evaluation of Services for Limited English Proficient Native American Students

AUTHOR: Rudes, Blair A.; Young, Malcolm B.; Shaycoft, Marion F.; Zehler, Annette M.; Day, Harry R.; Kaplan, Leesa

YEAR: 1988 CONTRACT #: 300-85-0175

ORGANIZATION: Development Associates, Inc.; Research Triangle Institute

APA: N FINDINGS: S,T,A,I

OBJECTIVES:

The primary objective of the first part of the study was to provide an analytic description of instructional services provided to limited English proficient Native American students in the elementary grades and to provide a description of students being served. The primary objective of the second part was to acquire an understanding of the degree to which these instructional services are effective in helping Indian students function in school. This report focuses only on the first part of the study.

METHODOLOGY:

The study focused on schools participating in Title VII projects for Native American students. Data were collected on two cohorts of students in a national sample of schools served by Title VII projects (58 projects were identified as serving primarily Native American students). Cohort 1 included students in grade 1 during the 1985-86 school year. Cohort 2 included students in grade 3 during 1985-86. Fifty-six of the 58 identified projects had complete descriptive data. Twenty-three projects were selected for on-site data collection. The 23 projects included 17 public schools, 12 tribally controlled schools, and 3 Bureau of Indian Affairs schools, all in remote and poor areas on or near current or former reservations. Schools ranged in size from 31-592 students. Information on school districts, schools, principals, instructional staff, parents, community leaders, and students were collected through questionnaires and standardized aptitude and achievement tests.

SUMMARY:

This report described and analyzed the instructional services provided to limited English proficient (LEP) Native American students in the elementary grades and the background characteristics and academic achievement of the students receiving these services. The study focused on schools participating in Title VII projects for Native American students. Context was provided to the study by briefly reviewing the history of Indian education in the United States and placing Title VII services within the overall framework. The report described the size and duration, goals and objectives, and services provided to the 23 projects selected for on-site visits. In addition, the study examined how students are identified as eligible for the Title VII services, and discussed context characteristics of the school, home, and community environments. The authors noted the great diversity of language groups and tribes represented in the study, pointing out the difficulty of making generalizations in such circumstances. Overall, though, the data indicated that Indian students attending rural schools on or near a reservation perform poorly on standardized achievement tests and have serious educational problems.

RECOMMENDATIONS:

The study recommended performing a comprehensive assessment of the schools that Indian children attend because the data show that while students have average or slightly above average aptitudes, they perform very poorly on standardized achievement tests.

CAVEATS/LIMITATIONS:

It should be noted that the extreme diversity of language backgrounds in schools served by 56 Title VII projects made it difficult to draw valid generalizations. In the 23 projects visited, there were 16 tribes and 18 languages.

30.2 TITLE: Academic Performance of Limited English Proficient Indian Elementary Students in Reservation Schools: Year Two Report of the National Evaluation of Services for Limited English Proficient Native American Students

AUTHOR: Young, Malcolm B.; Rudes, Blair A.; Shaycoft, Marion F.; Hopstock, Paul J.

YEAR: 1988 CONTRACT #: 300-85-0175

ORGANIZATION: Development Associates, Inc.; Research Triangle Institute

APA: N FINDINGS: I

OBJECTIVES:

The purpose of this report was to describe the academic performance of elementary grade level limited English proficient Indian students attending school on or near Indian reservations.

METHODOLOGY:

Data were collected over a two-year period from two student cohorts (1st and 3rd graders) in a national sample of elementary schools served by Title VII projects which served Native American students. During the first year, 23 projects serving 1,588 first and third graders in 32 schools were selected for on-site data collection. Information on school districts, schools, principals, instructional personnel, parents, community leaders, and students was collected through specially-developed questionnaires and standardized aptitude and achievement tests. Eight of the 23 projects were chosen for further study. During this second year, only a sample of students and their teachers were surveyed. Stanford Achievement Tests were given to sampled students. Descriptive, associative, and causal analyses were conducted to explain students' level of academic achievement based on test scores and interview data from teachers, parents, and school officials.

SUMMARY:

In this report, the academic performance of elementary grade level limited English proficient Indian students attending school on or near Indian reservations was described. The major finding of the study were that the academic achievement scores of the Indian students are extremely low. These scores declined or remained the same over the two years of the study, despite the fact that the schools had been receiving federal funding targeted at improving student achievement. Two factors were associated with the low test scores of these students: (1) community use of Indian languages and the subsequent low English proficiency; and (2) home/family characteristics such as lack of support for educational achievement.

RECOMMENDATIONS:

Those schools which are successful in terms of achievement test results and factors associated with that success should be systematically identified. The results of such a study could provide recommendations for improvements in the education of Indian children.

CAVEATS/LIMITATIONS:

The small size of the student sample imposed restrictions on the search for explanations for the low achievement of the students.

310 STUDY: PARENT PREFERENCE STUDY

TITLE: Parent Preference Study: Final Report

AUTHOR: Baratz-Snowden, Joan, Rock, Donald A., Pollack, Judith, Wilder, Gita Z.

YEAR: 1988 CONTRACT #: 300-85-0208

ORGANIZATION: Educational Testing Service

APA: Y FINDINGS: S

OBJECTIVES:

The objectives were to conduct a national survey of parents of school aged Asian, Puerto Rican, Mexican American, and Cuban students in order to examine educational preferences that language minority parents have regarding the role of English and the non-English (home) language in instruction and to determine what factors are associated with the various educational preferences that parents possess.

METHODOLOGY:

Survey samples included parents of Asian, Puerto Rican, and Mexican American students in grades three, seven and eleven who had participated in the National Assessment of Educational Progress Study (NAEP) and parents of Puerto Rican and Cuban students identified through telephone surveys in two large metropolitan areas. Data were collected through interviews (by telephone or in-person) with parents regarding their perceptions and attitudes toward school, general aspirations for children, family practices related to language use/contact, and demographic information. Interview questionnaire forms were also translated.

SUMMARY:

This report presents findings from a national survey of parents of school-aged Asian, Puerto Rican, Mexican-American, and Cuban students who are language minority, but not necessarily limited English proficient. Results demonstrate that all parents, regardless of ethnicity, support their childrens' learning English and the provision of special language services. Parents were most concerned with addressing the need for special services rather than concerning themselves with the best type of bilingual service. Parents also support giving extra help to students to learn English. Large differences exist among ethnic groups in terms of level of support for certain types of instruction. Both within and among ethnic groups there are differences in views regarding the most desirable instructional practices.

RECOMMENDATIONS:

With the diversity among and within ethnic groups regarding parental preferences for services, schools should offer options in the types of special language services they provide.

CAVEATS/LIMITATIONS:

The two study samples could not be combined for analysis because of differences in the selection processes. The sample of Asian, Mexican American, and some of the Puerto Rican parents were chosen from a National sampling frame. The supplementary sample, of Cuban and Puerto Rican parents, was selected from two large metropolitan areas. In addition, many of the parents who were interviewed were unable to specify the language policies/practices in their children's schools. Thus, it was difficult to generalize responses, and there was much "teaching " of bilingual services while gathering information, since many parents did not know the school situation.

32.0 STUDY: NATIONAL ASSESSMENT OF CHAPTER 1

TITLE: Chapter 1 Services to Language-Minority Limited English Proficient Students: A Substudy of the National Assessment of Chapter 1

AUTHOR: Carlson, Elaine; Strang , E. William

YEAR: 1988 CONTRACT #: 400-85-1008

ORGANIZATION: Decision Resources Corporation

APA: N FINDINGS: S,A,I

OBJECTIVES:

The purpose of this report was to describe the programs and services available for language-minority LEPs through Chapter 1 and other special federal, state, and local programs designed specifically for language minority LEPs. Three concerns central to the study were whether Chapter 1 provided English language services for language minority LEP students in place of non-Chapter 1 special programs; whether Chapter 1 selection procedures distinguished between language deficiency and educational deprivation; and whether Chapter 1 programs turned into language acquisition programs when serving language minority LEPs.

METHODOLOGY:

Multiple data sources from the National Assessment of Chapter 1 were reviewed. These data sources included: a national school survey of principals and teachers; a national district survey of Chapter 1 coordinators; a detailed study in 30 districts of how districts select Chapter 1 schools and students and the effects of these on services; and a study of how districts allocate resources and how schools and districts make Chapter 1 program design decisions.

SUMMARY:

Results indicated that Chapter 1 programs do not preclude offering a special language minority LEP program to language minority LEP students. Standardized achievement tests and teacher judgements were used by most districts in selecting students for Chapter 1 services, though some districts automatically excluded or included LM/LEPs in Chapter 1. Chapter 1 ESL services differed from regular Chapter 1 instruction and special LM/LEP programs that were not funded through Chapter 1.

CAVEATS/LIMITATIONS:

Data were collected at the school or district level, thus providing information on types of services offered but not on types of services actually received by students. Information on the variety of selection criteria, funding sources and levels, and program goals across states and districts was not collected.

33.0 STUDY: A DESCRIPTIVE STUDY OF THE SIGNIFICANT FEATURES OF EXEMPLARY SPECIAL ALTERNATIVE INSTRUCTIONAL PROGRAMS

TITLE: Study Design Report for A Descriptive Study of the Significant Features of Exemplary Special Alternative Instructional Programs (SAIP)

AUTHOR: Southwest Regional Educational Laboratory

YEAR: 1988 CONTRACT #: T288001001

ORGANIZATION: Southwest Regional Educational Laboratory

APA: N Findings: I

OBJECTIVES:

The objective of this report was to provide a design for conducting A Descriptive Study of the Significant Features of Exemplary SAIPs.

METHODOLOGY:

This report was a description of the study design for the overall study. It included a literature review and described criteria for sample selection, data collection procedures, data preparation and analyses, and the process for reporting findings. Data collection for the study included site visits, classroom observations, survey questionnaires, and a review of documents.

SUMMARY:

The overall purposes and objectives for the study are presented, and contextual features of instructional programs are discussed, including features of schools, curriculum and instruction, bilingual instruction, and second-language learning and teaching. In addition, characteristics of language minority-limited English proficient students as successful students are described.

34.0 STUDY: EFFECTIVENESS OF SERVICES FOR LANGUAGE-MINORITY LIMITED ENGLISH PROFICIENT STUDENTS

34.1 TITLE: Effectiveness of Services for Language-Minority Limited English Proficient Students: Executive Summary

AUTHOR: Burkheimer, Jr., G.J.; Conger, A.J.; Dunteman, G.H.; Elliot , B.G.; Mowbray, K.A.

YEAR: 1989 CONTRACT #: T288-016-001

ORGANIZATION: Research Triangle Institute

APA: N FINDINGS: S,T,A,I

OBJECTIVES:

This executive summary presents results of the analysis of data collected in the longitudinal phase of the National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited English Proficient Students (Young et al., 1984, 21.1; 1986, 21.2). The study was conducted from 1984 through 1987.

METHODOLOGY:

The analyses were based on data collected from selected schools and districts, using approximately 40 separate data collection instruments, including standardized achievement tests and a nonverbal measure of ability. Data were obtained on 5,748 students who were in the first grade during the base year of the longitudinal study and 4,428 who were in the third grade during the base year. Analyses were primarily restricted to a subset of eligible students who were LEP and Spanish speaking. Further restrictions reduced later analyses to a smaller number of the original group of students. A number of variables were analyzed: student background, educational history, home background, school and classroom characteristics, teacher characteristics, instructional exposure, program outcome measures.

SUMMARY:

This summary presents results of the longitudinal phase of the National Longitudinal Study of the Effectiveness of Services for Language Minority Limited English Proficient Students, based on data collected during 1984 through 1987. The analyses indicated that English oral proficiency was positively related to instructional approaches that support the use of English and emphasize reading and writing ability. Similarly, students who were provided with instruction specifically geared toward the limited English proficient had higher oral proficiency in their native language. Overall, however, achievement in math and English language arts was not facilitated by any one instructional method, but rather by an approach that was consistent with the students' skill level. The authors concluded that local policies and practices for the education of limited English proficient students are largely determined by such factors as legislative requirements, economic restraints, the number of limited English proficient students and the degree of community support for a given program.

CAVEATS/LIMITATIONS:

Incomplete data existed for LEPs. The proportion of original samples receiving LEP services in successive years represented different and smaller subpopulations. Different types of students, classrooms, teachers, instructional strategies, and schools were clustered within specific districts. The original study did not have sufficient numbers of LEP students receiving LEP services for the first time and the nature and the extent of prior LEP services were not fully described by the data.

342 TITLE: Effectiveness of Services for Language-Minority Limited English Proficient Students: Volume I (Chapters 1-8)

AUTHOR: Burkheimer, Jr., G.J.; Conger, A.J.; Dunteman, G.H.; Elliot, B.G.; Mowbray, K.A.

YEAR: 1989 CONTRACT #: T288-016-001

ORGANIZATION: Research Triangle Institute

APA: N FINDINGS: S,A,I

OBJECTIVES:

The purpose of this report was to analyze data collected in the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient students (Young et al., 1984, 21.1; 1986, 21.2), including summaries of all relevant results. The report discussed the relationships among and within background variables, and the effects of these on instructional exposure and student outcomes; the effects of school, teacher and classroom characteristics on instruction and student outcomes; and the effects of instructional exposure (and successive exposure) on student outcomes.

METHODOLOGY:

The analyses were based on data collected from selected schools and districts, using approximately 40 separate data collection instruments, including standardized achievement tests and a nonverbal measure of ability. Data were obtained on 5,748 students who were in the first grade during the base year of the longitudinal study and 4,428 who were in the third grade during the base year. Analyses were primarily restricted to a subset of eligible students who were LEP and Spanish speaking. Further restrictions reduced later analyses to a smaller number of the original group of students. A number of variables were analyzed: student background, educational history, home background, school and classroom characteristics, teacher characteristics, instructional exposure, program outcome measures.

SUMMARY:

The purpose of this report was to summarize data collected during the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students and analyzed in this study. Volume I discusses characteristics of two cohorts of native Spanish-speaking students, their teachers, classrooms, and schools. The relationships among these variables were reviewed in light of how well they predicted the types of services provided to LEPs, how these factors were related to English language arts and mathematics achievement, and exit procedures from LEP services. A variety of findings were noted. LEP students who were receiving services more akin to those provided to English proficient children were more likely to be exited from LEP services. Students who received instruction specifically geared to their skill level showed greater achievement in math and language arts. Overall, however, local policy largely determined the assignment of LEPs to special services as well as exit from services.

RECOMMENDATIONS:

The authors recommended that further study of these issues should consider selecting districts on the basis of services and exit policies; obtaining achievement results in math and language arts in the student's native language; devoting more effort to student contact and data collection over time; selecting students who are just entering special services or thoroughly reviewing their educational history; focusing on Hispanics, as they are the largest group of LEP students.

CAVEATS/LIMITATIONS:

Incomplete data existed for LEP students. The proportion of original samples receiving LEP services in successive years represented different and smaller subpopulations. Different types of students, classrooms, teachers, instructional strategies, and schools were clustered within specific districts. The original study did not have sufficient numbers of LEP students receiving LEP services for the first time and the study instruments did not adequately measure the nature and the extent of prior LEP services.

34.3 STUDY: EFFECTIVENESS OF SERVICES FOR LANGUAGE-MINORITY LIMITED ENGLISH PROFICIENT STUDENTS

TITLE: Effectiveness of Services for Language-Minority Limited English Proficient Students: Volume II (Appendices A-I)

AUTHOR: Burkheimer, Jr., G.J.; Conger, A.J.; Dunteman, G.H.; Elliot , B.G.; Mowbray, K.A.

YEAR: 1989 CONTRACT #: T288-016-001

ORGANIZATION: Research Triangle Institute

APA: N FINDINGS: I

OBJECTIVES:

The purpose of this document was to provide detail on study variables and models used in the analysis of the data collected in the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students (Young et al., 1984, 21.1; 1986, 21.2). It serves as the technical appendix.

METHODOLOGY:

The analyses were based on data collected from selected schools and districts, using approximately 40 separate data collection instruments, including standardized achievement tests and a nonverbal measure of ability. Data were obtained on 5,748 students who were in the first grade during the base year of the longitudinal study and 4,428 who were in the third grade during the base year. Analyses were primarily restricted to a subset of eligible students who were LEP and Spanish speaking. Further restrictions reduced later analyses to a smaller number of the original group of students. A number of variables were analyzed: student background, educational history, home background, school and classroom characteristics, teacher characteristics, instructional exposure, program outcome measures.

SUMMARY:

This document discussed information on the analytic variables of the National Longitudinal Evaluation of the Effectiveness of Services for Language-Minority Limited English Proficient Students and presented descriptive statistics on these variables. In addition, issues such as the potential bias due to the loss of missing data is examined and additional information on variable construction was presented. The specific procedures for developing school and district clusters, developing models for assignment to educational services, and measuring English language arts and mathematics achievement were also explained.

350 STUDY: EFFECTIVE MIGRANT EDUCATION PRACTICES

351 TITLE: Handbook of Effective Migrant Education Practices (Volume I: Findings)

AUTHOR: Rudes, Blair A.; Willette, JoAnne L.

YEAR: 1989 CONTRACT #: 300-87-0133

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: S,A,I

OBJECTIVES:

The objectives were to identify effective migrant education projects; to describe the major characteristics and services of these projects that contribute to positive student outcomes; and to isolate effective practices that might be replicated.

METHODOLOGY:

During the spring of 1988, 153 migrant educations projects were identified as effective, as reflected in significant student gains in academic achievement or other student outcomes. Seventeen of the identified projects were selected for data collection and reporting, partly on the basis of student outcome data submitted by projects. Sixteen sites were visited (1 was not operational so it was not included) for at least 1 week. Interviews were conducted with district, school, and program staff, teachers, students, parents, and community members; observations were made of a range of project services; and district and project records were reviewed. The projects examined included all year, regular school year, and summer term projects serving preschool, elementary, middle, and secondary school students.

SUMMARY:

This report is the first of two volumes about effective migrant education practices. It presents the general findings from an analysis of efforts to improve the performance of migrant students in public elementary and secondary schools. Based on data from 16 migrant education programs across the country, the report discusses approaches to identifying and recruiting migrant students and strategies for assessing their needs; provision of instructional and support services; parent involvement; dropout prevention; evaluation; resources; and factors to be considered in replicating any of the practices. Findings suggest that the success of migrant education projects depends, in large part, on the quality and enthusiasm of project staff and on the establishment of cooperative working relationships among project, school, and district staff, and the migrant and nonmigrant communities. The coordinated investment of effort by these groups is essential to the improvement of migrant students' educational opportunities.

352 TITLE: Handbook of Effective Migrant Education Practices (Volume II: Case Studies)

AUTHOR: Rudes, Blair A.; Willette, JoAnne L.; Bell, D. Scott; Shapiro, Lila

YEAR: 1990 CONTRACT #: 300-87-0133

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: A,I

OBJECTIVES:

The objectives were to identify effective migrant education projects; to describe the major characteristics and services of these projects that contribute to positive student outcomes; and to isolate effective practices that might be replicated.

METHODOLOGY:

During the spring of 1988, 153 migrant educations projects were identified as effective, as reflected in significant student gains in academic achievement or other student outcomes. Seventeen of the identified projects were selected for data collection and reporting, partly on the basis of student outcome data submitted by projects. Sixteen sites were visited (1 was not operational so it was not included) for at least 1 week. Interviews were conducted with district, school, and program staff, teachers, students, parents, and community members; observations were made of a range of project services; and district and project records were reviewed. The projects examined included all year, regular school year, and summer term projects serving preschool, elementary, middle, and secondary school students.

SUMMARY:

This is the second of two volumes reporting on effective migrant education practices. It describes 16 case studies of effective programs for serving currently and formerly migrant students in regular school year, summer term, and year-round projects. Attributes identified as potentially characteristic of effective migrant education projects included community support and parent involvement in programs; coordination among various programs, schools, and agencies serving migrant children; outreach and recruitment efforts; support services; and coordination of instruction with other teachers and programs. Although nearly all projects exhibited each of these characteristics, the degree to which these attributes were present varied by site. Each case study description includes an overview of school and community contexts; historical development of the program; description of services provided; funding, administration, and facilities; evidence of the program's effectiveness; and replicability of practices.

36.0 STUDY: INFORMAL ASSESSMENT IN EDUCATIONAL EVALUATION: IMPLICATIONS FOR BILINGUAL EDUCATION PROGRAMS

TITLE: Informal Assessment In Educational Evaluation: Implications For Bilingual Education Programs

AUTHOR: Navarrete, Cecilia; Wilde, Judith; Nelson, Chris; Martinez, Robert; Hargett, Gary

YEAR: 1990 CONTRACT #: T288003002

ORGANIZATION: Evaluation Assistance Center (West)

APA: N FINDINGS: A

OBJECTIVES:

This report discusses the use of various informal assessment techniques in bilingual education program evaluation, including a review of the problems presented by standardized tests, a description of alternative assessment approaches, and a discussion of how alternative approaches can be successfully combined with standardized tests.

METHODOLOGY:

The authors describe several types of structured and unstructured informal assessment techniques that can be used to measure individual limited English proficient student progress and discuss guidelines for establishing the validity and reliability of such techniques and for combining assessments. They also discuss how these techniques can be used for program assessment by summarizing all student outcome data collected from each instrument.

SUMMARY:

The nature of bilingual education programs demands a test or assessment tool which assesses the unique objectives of that program. Standardized tests are not always sensitive to such programs and thus alternative assessments should be explored. A number of informal assessment techniques are discussed which may be used to supplement standardized tests. While formal measures provide general year-to-year progress in global content areas, informal techniques can provide the continuous ongoing measurement of student growth necessary for planning.

RECOMMENDATIONS:

Bilingual education program evaluations can be improved by using a combination of formal and informal assessments.

37.0 STUDY: DESCRIPTIVE EVALUATION OF THE TRANSITION PROGRAM FOR REFUGEE CHILDREN AND THE EMERGENCY IMMIGRANT EDUCATION PROGRAM

37.1 TITLE: Descriptive Evaluation of the Transition Program for Refugee Children and the Emergency Immigrant Education Program: Summary of Literature Review and Federal Interviews

AUTHOR: Bateman, Peter; Cheung, Oona; Chew, Susan

YEAR: 1990 CONTRACT #: LC89022001

ORGANIZATION: Cosmos Corporation

APA: Y FINDINGS: A

OBJECTIVES:

The objectives were to summarize information regarding the Transition Program for Refugee Children and the Emergency Immigrant Education Program, and to refine and present tentative answers to a set of study questions regarding the operation and impact of the two programs.

METHODOLOGY:

The methodology included a review of literature on state applications and performance reports for each program, as well as reviews of federal agency databases, previous studies of the eligible refugee or immigrant student population, and other published reports. Interviews were conducted with 12 federal officials.

SUMMARY:

The purpose of this report was to summarize information available on the operation and impact of two federally-funded state-administered refugee programs (The Transition Program for Refugee Children and the Emergency Immigrant Education Programs) in order to determine a final set of study questions to be addressed. The study questions developed by the literature review and interviews address program targeting, characteristics of eligible children, program administration, services, expenditures, and outcomes.

37.2 TITLE: Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program: Data Collection, Sampling, and Analysis Plan

AUTHOR: Mertens, Jennifer, Bateman, Peter, Tallmadge, Kasten

YEAR: 1990 CONTRACT #: LC89022001

ORGANIZATION: Cosmos Corporation

APA: N FINDINGS: A

OBJECTIVES:

The objectives were to present the plan for collecting and analyzing data from state and local grantees in two programs for educating refugee and immigrant children.

METHODOLOGY:

Three surveys were developed for the study: a telephone survey of all SEAs, a mail survey of all FY 1989 grant recipients, and a mail survey of local school districts that enroll eligible children but do not participate in the Immigrant program. Site visits to a sample of nine agencies participating in each program were designed to document services, describe program outcomes, expenditures, and students served.

SUMMARY:

This document presents the study plan for sampling, collecting, and analyzing data from the state and local grantees in the study "Descriptive Evaluation of the Transition Program for Refugee Children and the Emergency Immigrant Education Program." The first section of the document describes the purposes of the surveys and site visits and the procedures for administering the data collection instruments. The second section discusses the procedures for receiving and coding completed surveys and the plans for the data analysis.

38.0 STUDY: LONGITUDINAL STUDY OF STRUCTURED ENGLISH IMMERSION STRATEGY, EARLY-EXIT AND LATE-EXIT TRANSITIONAL BILINGUAL EDUCATION PROGRAMS FOR LANGUAGE-MINORITY CHILDREN

38.1 TITLE: Second Year Report Longitudinal Study of Immersion Programs for Language-Minority Children

AUTHOR: Ramirez, J. David; Yuen, Sandra D.; Ramey, Dena R.

YEAR: 1986 CONTRACT #: 300-83-0250

ORGANIZATION: SRA Technologies

APA: N FINDINGS: I

OBJECTIVES:

The purpose of this study was to present information on how structured English immersion strategy, early-exit, and late-exit transitional bilingual education programs are implemented and to identify differences and similarities among these three programs. Data collected during the second year of the study on students and their instructional programs are summarized in this report. The report also describes students' oral language, reading, language arts, and math proficiency.

METHODOLOGY:

Information on Spanish and English language use, engaged academic time, student groups, and activities was collected over a two-year period (1984-86) from observations of both randomly selected target students and all students within project classrooms. For each targeted student, data were obtained on the child's academic performance, skills, and family background, as well as teacher, classroom, school, and district characteristics. Test scores were taken from language proficiency and achievement tests. Interviews were held with teachers, parents, project administrators, and site administrators.

SUMMARY:

Based on Second Year data, there were very few differences among the three programs regarding students' oral language proficiency, type of groups and activities, and qualifications of classroom aides. Teachers' use of English and Spanish differed by program and by grade level. However, they used similar types of statements in both languages. (Immersion teachers were the exception. They used Spanish for feedback purposes.) Patterns of student responses in the classroom indicated that their learning environment was not conducive to oral language skill development. Differences in reading and math scores among students in the three programs were reported, and these are described in the report.

CAVEATS/LIMITATIONS:

Further research is needed to determine to what extent any program differences are due to the instructional strategies rather than to pretreatment differences.

38.2 TITLE: Final Report: Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children (Volume 1)

AUTHOR: Ramirez, J. David; Yuen, Sandra D.; Ramey, Dena R.; Pasta, David J.

YEAR: 1991 CONTRACT #: 300-87-0156

ORGANIZATION: Aguirre International

APA: N FINDINGS: S,I

OBJECTIVES:

The primary objective of the study was to assess the relative effectiveness of structured English immersion strategy, early-exit and late-exit transitional bilingual education programs. Volume I looks at findings related to student, teacher, classroom and district characteristics in order to confirm the extent to which classrooms within each program reflect their respective instruction modules.

METHODOLOGY:

The performance of elementary school language minority students in structured English immersion programs was compared with peers in early-exit and late-exit transitional bilingual education programs over a four year period. The districts in the study (9) were purposively selected to represent the purest possible forms of these delivery models. Only programs serving Spanish speaking limited English proficient students were selected. Information obtained for each student included academic performance and skills, language proficiency, family background, teacher, classroom, school and district characteristics. Data for over 1,000 students were collected in each of the four years. A variety of data collection methods were used, including standardized tests, interviews, and classroom observations.

SUMMARY:

A comparison of structured English immersion, early-exit and late-exit transitional bilingual education programs found that the three programs do, in fact, represent distinct instructional services. Consistent with their respective models, there were differences in the amount of English and Spanish instruction provided. English was used 94.3% to 98.6% in all immersion strategy classrooms. The three programs also differed in the rate at which students were reclassified or mainstreamed. Surprisingly, a greater proportion of early-exit students (72%) were reclassified after four years than were immersion strategy students (66%). There were also differences in parent involvement. Parents of students in late-exit programs were more likely to help with or monitor their children's homework. The programs were comparable in terms of the quality of instruction. None of the three provided an active learning environment for language and cognitive skills development.

RECOMMENDATIONS:

Federal guidelines of services to language minority students should be reviewed to reflect the fact that, despite support for early mainstreaming among immersion strategy and early-exit staff, fewer than one-fourth of language minority students are mainstreamed by grade four. It is also recommended that federal efforts focus on improving the quality of training programs for teachers serving language minority students so that they can provide a more active learning environment.

38.3 TITLE: Final Report: Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children (Volume 2)

AUTHOR: Ramirez, J. David; Pasta, David J.; Yuen, Sandra D.; Billings, David K.; Ramey, Dena R.

YEAR: 1991 CONTRACT #: 300-87-0156

ORGANIZATION: Aguirre International

APA: N FINDINGS: I

OBJECTIVES:

The primary objective of the study was to assess the relative effectiveness of structured English immersion strategy, early-exit and late-exit transitional bilingual education programs. Volume II looks at findings related to the successful implementation of each program and describes the achievement of Spanish -speaking language minority children over time.

METHODOLOGY:

The performance of elementary school language minority students in structured English immersion programs was compared with peers in early-exit and late-exit transitional bilingual education programs over a four year period. The districts in the study (9) were purposively selected to represent the purest possible forms of these delivery models. Only programs serving Spanish speaking limited English proficient students were selected. Information obtained for each student included academic performance and skills, language proficiency, family background, teacher, classroom, school and district characteristics. Data for over 1,000 students were collected in each of the four years. A variety of data collection methods were used, including standardized tests, interviews, and classroom observations.

SUMMARY:

The study reported that (1) Overall, there was no difference in achievement level or rate of growth for students in an immersion strategy program versus an early-exit program; (2) Substantial amounts of primary language instruction can be provided to limited English proficient students without impeding their acquisition of English language and reading skills; and (3) Limited English proficient (LEP) students who are provided with substantial instruction in their primary language successfully continue to increase their achievement in content areas such as mathematics. Students who are quickly transitioned into English-only classes tend to grow slower than the norming population.

RECOMMENDATIONS:

Current federal efforts to support primary language instructionare are justified; however, further analyses are needed to identify those classroom, school, and district characteristics that are critical to student success.

CAVEATS/LIMITATIONS:

The complexity of the study design prohibited a concurrent assessment of the relative effectiveness of all 3 programs. Therefore, some of the analyses did not consider the potential effects of non-program factors.

38.4 TITLE: Executive Summary: Final Report of the Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children

AUTHOR: Ramirez, J. David; Yuen, Sandra D.; Ramey, Dena R.

YEAR: 1991 CONTRACT #: 300-87-0156

ORGANIZATION: Aguirre International

APA: N FINDINGS: S,T,A,I

OBJECTIVES:

The main objective of the study was to compare the relative effectiveness of two alternative programs (structured English immersion strategy and late-exit transitional bilingual education) with that of the early-exit transitional bilingual education program.

METHODOLOGY:

The performance of elementary school language minority students in structured English immersion programs was compared with peers in early-exit and late-exit transitional bilingual education programs over a four-year period. The districts in the study (9) were purposively selected to represent the purest possible forms of these delivery models. Only programs serving Spanish-speaking language minority students were selected. Information obtained for each student included academic performance and skills, language proficiency, family background, and teacher, classroom, school, and district characteristics. Data for over 1,000 students were collected in each of the four years. A variety of data collection methods were used, including standardized tests, interviews, and classroom observation.

SUMMARY:

One of the main findings of the comparison of the structured English immersion and late-exit transitional bilingual program with the early-exit transitional bilingual program was that the use of native language instruction does not impede the acquisition of English language and reading skills. However, the instructional strategies of all three programs create a passive learning environment, thus limiting students' opportunities to develop complex language and critical thinking skills. The authors suggested that efforts be made to disseminate information to improve the quality of instruction.

RECOMMENDATIONS:

Limited English proficient students may need prolonged assistance if they are to succeed in an English-only mainstream classroom. Efforts should be made to disseminate information to improve the quality of training programs for teachers serving language minority students, so that they can provide a more active learning environment. Schools should explore the use of the home language of students to increase parental involvement. LEP students should not be abruptly transferred from L1 to L2 instruction.

CAVEATS/LIMITATIONS:

Study results are applicable only to those programs serving Spanish-speaking language-minority students and to those instructional programs exhibiting the same characteristics as those in this study.

39.0 STUDY: INNOVATIVE APPROACHES RESEARCH PROJECT

39.1 TITLE: Partners for Valued Youth: Dropout Prevention Strategies for At-risk Language Minority Students (A Handbook for Teachers and Planners)

AUTHOR: Robledo, Maria del Refugio; Cardenas, Jose A.; Garcia, Yolanda M.; Montemayor, Aurelio M.; Ramos, Merci G.; Supik, Josie D.; Villareal, Abelardo

YEAR: 1990 CONTRACT #: 300-87-0131

ORGANIZATION: Intercultural Development Research Associates; Development Associates, Inc.

APA: N FINDINGS: I

OBJECTIVES:

The purpose of this handbook was to present guidelines for teachers and planners interested in implementing the Partners for Valued Youth program, an innovative instructional model that encourages "at-risk" students to stay in school and set broader goals for themselves.

METHODOLOGY:

Approximately 90 LEP middle school students participated in the 2-year PVY dropout prevention program in four schools in two districts in San Antonio. One hundred LEP students served as a comparison group. Program goals were evaluated using a pretest and two post-test scores in mathematics, English and reading; attendance records; dropout rates; disciplinary referrals; self-esteem as measured by the Piers-Harris self-concept scale; attitudes toward school as measured by the Quality of School Life Scale; and parental involvement. Data were also collected on program implementation at each site. Case studies of four tutors were conducted to better describe the dynamics of the program.

SUMMARY:

The Handbook describes major features of the Partners for Valued Youth (PVY) program model, and develops a plan for implementation. The PVY program for at risk students includes such critical elements as tutoring and tutor preparation, field trips, role models, student recognition, and parental involvement. The Handbook also contains an outline of the types of outcomes that might be expected from the use of the program and presents additional sources of information on the model and its findings.

39.2 TITLE: Partners for Valued Youth: Dropout Prevention Strategies for At-Risk Language Minority Students (Final Technical Report)

AUTHOR: Robledo, Maria del Refugio; Cardenas, Jose A.; Garcia, Yolanda M.; Montemayor, Aurelio M.; Ramos, Merci G.; Supik, Josie D.; Villareal, Abelardo

YEAR: 1990 CONTRACT #: 300-87-0131

ORGANIZATION: Intercultural Development Research Association; Development Associates, Inc.

APA: N FINDINGS: I

OBJECTIVES:

The objectives of the Partners for Valued Youth (PVY) program were to reduce dropout rates, enhance students' basic academic skills and language proficiency, strengthen students' perceptions of self and school, decrease student truancy, reduce student disciplinary referrals, and form school-home-community partnerships to increase the level of support available to students. The goal was also to see if these components varied by type/quality of class attended and number/quality of tutoring sessions, field trips, role models, or parent involvement sessions.

METHODOLOGY:

Approximately 90 LEP middle school students participated in the 2-year PVY dropout prevention program in four schools in two districts in San Antonio. One hundred LEP students served as a comparison group. Program goals were evaluated using a pretest and two posttest scores in mathematics, English and reading; attendance records; dropout rates; disciplinary referrals; self-esteem as measured by the Piers-Harris self-concept scale; attitudes toward school as measured by the Quality of School Life Scale; and parental involvement. Data were also collected on program implementation at each site. Case studies of four tutors were conducted to better describe the dynamics of the program.

SUMMARY:

The Partners for Valued Youth (PVY) program is an instructional, cross-age tutoring program designed to reduce dropout rates among Hispanic middle-school children who are limited English-proficient (LEP) and who are at risk of leaving school. This Final Technical Report describes the program and its outcomes for tutors and tutees. Overall, the PVY program showed lower drop-out rates, and higher achievement for students who participated as tutors for elementary students. Tutors also developed a higher self-concept and a greater interest in school. Parents of tutors reported greater communication with their children and a positive change in their child's behavior. Tutees reported fewer absences and disciplinary actions.

RECOMMENDATIONS:

The PVY program may not work for everyone. Components critical to its success included weekly classes for tutors, with a minimum of 30 sessions per year; minimum age and grade differences between tutor and tutee of 3 years; the provision of a stipend; a flexible curriculum based on student's tutoring and academic needs; and a dedicated and committed project staff.

39.3 TITLE: Cheche Konnen: Collaborative Scientific Inquiry in Language Minority Classrooms (Technical Report)

AUTHOR: Warren, Beth; Rosebery, Ann S.; Conant, Faith

YEAR: 1990 CONTRACT #: 300-87-0131

ORGANIZATION: Technical Education Research Associates; Development Associates, Inc.

APA: N FINDINGS: I, T

OBJECTIVES:

The purpose of the Cheche Konnen project ("search for knowledge" in Haitian Creole) was to enculturate students into the ways of collaborative, interdisciplinary scientific inquiry.

METHODOLOGY:

Cheche Konnen was field tested in two public schools in a large ethnically, economically, and linguistically diverse city in eastern Massachusetts. Approximately 140 students and 6 teachers in an elementary school, (grades K-8), and a high school participated in the fall and spring of 1988-89 school year. Pre- and post-intervention interviews with teachers and students and transcripts of classroom discourse were analyzed using constructs from ethnography, cognitive science, sociolinguistics and literary theory. The number and kinds of questions teachers asked throughout the year were examined and students were asked to reason through two problems designed to assess growth in scientific knowledge and thinking. Pre-test/post-test scores were analyzed to show changes in mastery of lesson content, as well as increased ability to generate hypotheses and methods for testing those hypostheses.

SUMMARY:

This technical report presents an overview and research background related to the implementation of a collaborative inquiry approach to science called Cheche Konnen ("search for knowledge" in Haitian Creole). The goal of the project was for students to develop scientific ways of thinking through a cooperative effort between teachers and students. Results showed that, when implemented effectively, Cheche Konnen has the potential to transform schools as well as classrooms into contexts for meaningful learning. Teachers modified their instructional practices to become facilitators of scientific inquiry, asking questions that challenged students. Students began to organize their thinking in terms of hypotheses, experiments, evidence and systematic explanations. The school community recognized the achievement of language minority students in their school, resulting in more collaboration between bilingual and mainstream staff.

39.4 TITLE: Cheche Konnen: Collaborative Scientific Inquiry in Language Minority Classrooms (A Handbook for Teachers and Planners, Second Edition)

AUTHOR: Warren, Beth; Rosebery, Ann S.; Conant, Faith; Hudicourt Barnes, Josiane

YEAR: 1991 CONTRACT #: 300-87-0131

ORGANIZATION: Technical Education Research Associates; Development Associates, Inc.

APA: N FINDINGS: I,T

OBJECTIVES:

This handbook presents guidelines for the implementation of a collaborative inquiry approach to science called Cheche Konnen ("search for knowledge" in Haitian Creole). The goal of Cheche Konnen was for students to develop scientific ways of thinking, talking and acting.

METHODOLOGY:

An overview of the theoretical framework for the Cheche Konnen approach was presented, along with general and specific guidelines for implementation of the model. Detailed case studies and a list of resources were also provided. Cheche Konnen was field tested in two public schools in a large ethnically, economically, and linguistically diverse city in eastern Massachusetts. Approximately 140 students and 6 teachers in an elementary school, (grades K-8), and a high school participated in the fall and spring of 1988-89 school year. Pre- and post-intervention interviews with teachers and students and transcripts of classroom discourse were analyzed using constructs from ethnography, cognitive science, sociolinguistics and literary theory. The number and kinds of questions teachers asked throughout the year were examined and students were asked to reason through two problems designed to assess growth in scientific knowledge and thinking. Pre-test/post-test scores were analyzed to show changes in mastery of lesson content, as well as increased ability to generate hypotheses and methods for testing those hypostheses.

SUMMARY:

This handbook presents guidelines for the implementation of a collaborative inquiry approach to science called Cheche Konnen ("search for knowledge" in Haitian Creole). Results showed that, when implemented effectively, Cheche Konnen has the potential to transform schools as well as classrooms into contexts for meaningful learning. Teachers modified their instructional practices to become facilitators of scientific inquiry. Students began to organize their thinking in terms of hypotheses, experiments, evidence and systematic explanations. The school community recognized the achievement of language minority students in their school, resulting in more collaboration between bilingual and mainstream staff.

RECOMMENDATIONS:

Findings argue for important general changes in schools and classrooms to make schooling more effective, including a more participatory and cooperative teaching and learning approach, along with instructional content that is both challenging and culturally and personally relevant to students.

39.5 TITLE: Community Knowledge and Classroom Practice: Combining Resources for Literacy Instruction (A Handbook for Teachers and Planners).

AUTHOR: Moll, L. C.; Velez-Ibanez, C.; Greenberg, J.; Andrade, R.; Dworin, J.; Saavedra, E.; Whitmore, K.

YEAR: 1990 CONTRACT #: 300-87-0131

ORGANIZATION: The University of Arizona; Development Associates, Inc.

APA: N FINDINGS: I, T

OBJECTIVES:

The purpose of this handbook was to describe the conceptual underpinnings of the Community Knowledge approach to literacy instruction along with guidelines for implementation.

METHODOLOGY:

The underlying rationale of the community knowledge and classroom practice approach was explored, along with general methods of implementation. Specific instructional strategies were examined through three case studies of exemplary classroom instruction. In addition, resources, contacts, materials, and a bibliography were accessed for data.

SUMMARY:

This handbook provides information about the Community Knowledge and Classroom Practice approach for providing literacy instruction to language minority students. The central premise of the approach is that households of language minority and working class families provide valuable resources for classroom instruction. The handbook details strategies and resources for implementing the model's three main components: (1) an ethnographic analysis of the home environment of the students; (2) implementation of "after school" study groups in which teachers use the ethnographic findings as a basis for curricular innovation, and (3) classroom observations and analysis of changed teaching strategies.

396 TITLE: Community Knowledge and Classroom Practice: Combining Resources for Literacy Instruction (Technical Report)

AUTHOR: Moll, L. C.; Velez-Ibanez, C.; Greenberg, J.; Andrade, R; Dworin, J.; Fry, D.; Saavedra, E.; Tapia, J.; Whitmore, K.

YEAR: 1990 CONTRACT #: 300-87-0131

ORGANIZATION: The University of Arizona; Development Associates, Inc.

APA: N FINDINGS: T,I

OBJECTIVES:

The objectives were to identify, coordinate, and "mix" household, classroom, teacher, and student resources to advance the literacy instruction of language minority students.

METHODOLOGY:

The methodology used included three interrelated activities. First, an ethnographic study of Latino households focused on the transmission of knowledge and skills. Second, an after-school lab was created where teachers, researchers, and students collaboratively experimented with literacy instruction. Lastly, classroom research was conducted which documented and analyzed project teachers' literacy instruction and implementation of innovative strategies in 9 classrooms. Data were collected from treatment and comparison classrooms through observation, reading and writing samples, and other methods. Household data was primarily collected through participant observation, including questionnaires and field notes. The results for the after-school labs were also documented. The sample included 90 students, 12 teachers, and 28 families.

SUMMARY:

This report documents a three-year ethnographic study of selected Latino households, classroom literacy instruction, and "after-school" teacher-researcher-student study groups. Implications for educational practice focused on re-defining the resources available for use in classrooms. Three resources were mentioned: 1) households as cognitive resources, 2) teachers as resources for each other, and 3) students as resources for teaching. Additionally, six principles of instruction were identified: 1) engage students in academically challenging and interesting activities; 2) all students can be learners; 3) obtaining and communicating meaning are the only legitimate reasons for using literacy; 4) bilingualisim should be used as a resource to expand the students' literate and social worlds; 5) all classroom materials must be meaningful and relevant; 6) always consider the students' and their families' funds of knowledge as the basis for instruction.

39.7 TITLE: Collaboration in Teaching and Learning: Findings from the Innovative Approaches Research Project

AUTHOR: Rivera, Charlene; Zehler, Annette

YEAR: 1990 CONTRACT #: 300-87-0131

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: S,T,A,I

OBJECTIVES:

The focus of the Innovative Approaches Research Projects (IARP) was to develop innovative instructional and intervention models for language minority (LM) students in 4 topic areas: dropout prevention, instruction of exceptional students, instruction in science and math, and instruction in literacy. The objectives were to offer practical innovative alternatives for instructing language minority students that would raise their achievement levels and help keep "at risk" language minority students in school. An additional goal was to disseminate study results to practitioners, researchers, and policy makers.

METHODOLOGY:

One model within each of four topic areas (dropout prevention, instruction of exceptional students, instruction in science and math, and instruction in literacy) was selected for implementation within programs serving Language Minority students. Priority was given to pragmatic instructional approaches with a foundation in research in both the topic areas and in research related to language teaching and learning. Models that were selected, implemented, and examined were: Partners for Valued Youth and Dropout Prevention Strategies for At-Risk Language Minority Students; AIM for the BEST Assessment and Intervention Model for the Bilingual Exceptional Student; Community Knowledge and Classroom Practice: Combining Resources for Literacy Instruction; Cheche Konnen: Collaborative Scientific Inquiry in Language Minority Classrooms. For each model, implementation involved collaboration of researchers, administrators, and teachers. Quantitative and qualitative data were collected in order to examine the strengths and weaknesses of the innovations for both students and teachers. (See #110-115, 117-118 for further discussion of the methodology.)

SUMMARY:

This report provides an overview of the Innovative Approaches Research Project (IARP). The project identified four innovative research and demonstration models for language minority students, one in each of four topic areas: dropout prevention, instruction of exceptional students, instruction in science and math, and instruction in literacy. The paper outlines the model employed within each of these topic areas and summarizes the overall implications of the findings. Each of the IARP models were demonstrated to have a positive impact on students, classrooms, and schools.

RECOMMENDATIONS:

The common themes identified in the four models had implications for structuring effective instructional programs including the need for restructuring schooling to open up communication both within the school community and between the school and outside community, the value of using participatory and cooperative teaching and learning approaches; the importance of providing challenging instructional content that is culturally and personally relevant to students; the use of greater teacher initiative in structuring the classroom and the range of activities; the usefulness of collaboration among teachers; and the need for renewed examination of issues important to the achievement of students.

CAVEATS/LIMITATIONS:

Many results of the IARP models can place the teacher in conflict with needs and requirements as defined by school and district policies.

39.8 TITLE: AIM For the BESt: Assessment and Intervention Model for the Bilingual Exceptional Student (A Handbook for Teachers and Planners, Second Edition)

AUTHOR: Ortiz, Alba A.; Wilkinson, Cheryl Y.; Robertson-Courtney, Phyllis; Kushner, Millicent, I.

YEAR: 1991 CONTRACT #: 300-87-0131

ORGANIZATION: The University of Texas at Austin; Development Associates, Inc.

APA: N FINDINGS: T,I

OBJECTIVES:

The objectives of this handbook were to outline the implementation of AIM for the BESt, an innovative instructional/intervention model developed specifically to meet the needs of exceptional language minority children.

METHODOLOGY:

Methodology included a discussion of the rationale behind the AIM for the BESt approach, a description of the model, suggestions for implementation, and sample teaching units. The AIM for the BESt model was implemented in a central Texas school district serving 6,000 students in grades K-12. Over on-half (59.2%) of the students were Hispanic and 42% received free or reduced-price lunch. There were three components to the model: (1) Student/Teacher Assistance Teams; (2) Curriculum-based assessment; and (3) Innovative Instructional Approaches. Data collection for each component involved different groups of subjects, activities, and outcome measures.

SUMMARY:

The handbook describes the AIM for the BESt Assessment and Intervention Model, a comprehensive service delivery system developed specifically to meet the needs of exceptional language minority children. Three components form the Model: (1) school-based problem-solving teams (Student/Teacher Assistance Teams); (2) techniques to assess language minority students' literacy skills (Curriculum Based Assessment) ; and (3) innovative instructional approaches which focus on listening and reading (Shared Literature) and on writing (Graves Writing Workshop). Suggestions for implementation, including sample teaching units and a list of available resources, are provided.

RECOMMENDATIONS:

Implementation of the AIM for the BESt model has several implications for practice. First, serving students in the mainstream is more cost-effective than placing them in special education. Second, campus-based problem-solving teams provide support to teachers and students across programs. Third, regular and special education teachers become a critical component in the assessment of student performance.

39.9 TITLE: AIM For the BESt: Assessment and Intervention Model for the Bilingual Exceptional Student (Technical Report, Second Edition)

AUTHOR: Ortiz, Alba A.; Wilkinson, Cheryl Y.; Robertson-Courtney, Phyllis.; Bergman, Alan

YEAR: 1991 CONTRACT #: 300-87-0131

ORGANIZATION: The University of Texas at Austin; Development Associates, Inc.

APA: N FINDINGS: T, I

OBJECTIVES:

The objectives were to field-test and refine the Assessment and Intervention Model for the Bilingual Exceptional Student (AIM for the BESt) by implementing it in a primarily Hispanic school district.

METHODOLOGY:

The AIM for the BESt model was implemented in a central Texas school district serving 6,000 students in grades K-12. Over on-half (59.2%) of the students were Hispanic and 42% received free or reduced-price lunch. There were three components to the model: (1) Student/Teacher Assistance Teams; (2) Curriculum-based assessment; and (3) Innovative Instructional Approaches. Data collection for each component involved different groups of subjects, activities, and outcome measures.

SUMMARY:

This technical report describes the results of the two-year field test of the Assessment and Intervention Model for the Bilingual Exceptional Student (AIM for the BESt). The data suggest that implementation of the model's components reduced special education referrals, and increased students' reading, oral, and written proficiency. Additionally, students showed increased self-confidence and self-esteem and staff benefitted from the collaborative interaction afforded by the model.

40.0 STUDY: PROVIDING CHAPTER 1 SERVICES TO LIMITED-ENGLISH-PROFICIENT STUDENTS

TITLE: Providing Chapter 1 Services to Limited-English-Proficient Students: Final Report

AUTHOR: Strang, E. William; Carlson, Elaine

YEAR: 1991 CONTRACT #: LC89089001

ORGANIZATION: Westat, Inc.

APA: N FINDINGS: S,T,A,I

OBJECTIVES:

The research objectives were to describe local procedures for implementing requirements of Chapter 1 regarding the selection of LEP students for Chapter 1 services and to describe the types of services provided to LEP students through Chapter 1.

METHODOLOGY:

Case studies of 14 school districts in six states were conducted. Researchers used survey instruments with in-person interviews at district and school levels with both administrators and teachers. They collected and reviewed documentation, and collected demographic and program characteristics of the local education agencies and schools visited. Based on telephone interviews with state-level administrators, the sample was selected from public elementary schools to reflect the variation in percentage of LEP students in the population. Forty-two schools were selected and visited.

SUMMARY:

Results showed that Chapter 1 selection procedures for LEP students included Oral English language proficiency tests, standardized achievement tests, and teacher judgment. Two underlying philosophical perspectives were identified and linked to staff qualifications and instructional services. Other findings concerned problems in information dissemination and coordination of Chapter 1 programs with other categorical and regular programs; the need for staff training; and the development of native language basic skills assessment tools. Little uniformity in the definitions of limited English proficient students was found, and minority language, limited English proficient students constituted a problem of unknown size in terms of Chapter 1 selection and services.

RECOMMENDATIONS:

Chapter 1 can provide ESL services, but they are supplementary to other services, and students should be selected on the basis of their educational needs in addition to their lack of English-language proficiency. Development of native language assessment instruments should be encouraged, and services should be designed in coordination with other language programs. States should be required to provide assurances that Chapter 1 requirements for serving LEP students are disseminated to local projects, that there be appropriate monitoring of requirements, and that the state office will provide assistance when needed. Selection procedures should include such sources as educational histories, informal assessments, and classroom performance, rather than English language achievement measures. A combination of measures, such as teacher judgment, educational history, and informal assessment, should be used for Chapter 1 selection and needs assessment. The authors question the premises of the sequential services philosophy.

CAVEATS/LIMITATIONS:

The authors noted the growth in the size of the LEP population and the uneven availability of LEP services.

41.0 STUDY: TEACHING ADVANCED SKILLS TO EDUCATIONALLY DISADVANTAGED STUDENTS

TITLE: Teaching Advanced Skills to Educationally Disadvantaged Students. Data Analysis Support Center (DASC) Task 4. Final Report.

AUTHOR: Means, Barbara; Knapp, Michael S. (Eds.)

YEAR: 1991 CONTRACT #: LC89089001

ORGANIZATION: Policy Studies Associates; SRI International

APA: N FINDINGS: I

OBJECTIVES:

The objectives were to provide practitioners with concrete, realizable models for effectively teaching advanced skills to disadvantaged students in elementary and secondary school grades, and to provide descriptions (by leading researchers in advanced-skills instruction) of practical approaches for teaching reading comprehension, writing, and math reasoning to educationally disadvantaged students.

METHODOLOGY:

The study consisted of description papers of programs and instructional and curriculum ideas by leading researchers. The descriptive papers are then discussed by additional experts with extensive experience working with disadvantaged students in the classroom.

SUMMARY:

This report contains six papers by leading researchers that describe alternative models for teaching advanced skills of mathematics reasoning, reading comprehension, problem solving, and composition to educationally disadvantaged students. A review of current instructional practices shows that the instructional assistance provided to these students often focuses on building "basic skills" as a precursor to more advanced/comprehensive skill development, which few students attain. The authors of the alternative models, however, demonstrate that focusing on the knowledge, skills, abilities, and outside experiences of the students allows them to be active learners in their school work. Conclusions are that complex, meaningful tasks should be used as the context for instruction on both advanced and basic skills. Each paper in the report is followed by comments discussing the implications of the alternative approach presented.

RECOMMENDATIONS:

Teachers should be provided with appropriate learning experiences (other conceptions of educationally disadvantaged children) for implementation of new approaches. New approaches should be incorporated into the design of compensatory programs (i.e. consider the emphasis on discrete skills, the use of tests, the use of staff lacking training in advanced skills instruction). A supportive framework should be developed in the regular academic program (i.e. in the school and district policies, structure of school days, curricula, and testing). The whole school, rather than only one entity of the system, must change its perspective on teaching the educationally disadvantaged.

42.0 STUDY: SUMMARY OF STATE CHAPTER 1 PARTICIPATION AND ACHIEVEMENT INFORMATION FOR 1988-89

TITLE: A Summary of State Chapter 1 Participation and Achievement Information for 1988-1989

AUTHOR: Sinclair, Beth; Gutmann, Babette

YEAR: 1991 CONTRACT #: LC89089001

ORGANIZATION: Westat Corporation

APA: Y FINDINGS: S,A,I

OBJECTIVES:

The objective was to summarize the 1988-89 State Performance Reports for the Chapter 1 LEA program and the Chapter 1 State Agency Neglected or Delinquent Program, including trends from 1979-89.

METHODOLOGY:

State performance reports were received from ED and entered into a data base. Data checks were conducted, and SEAs were contacted to explain discrepancies. Revised data were summarized.

SUMMARY:

This report summarizes 1988-89 State participation in Chapter 1 LEA and Neglected or Delinquent programs. Data are presented by state on services and staffing patterns, student characteristics, student achievement in mathematics and reading, and allocation and cost information.

CAVEATS/LIMITATIONS:

Many states reported no data for some or all of the new data items required by the Elementary and Secondary School Improvement Amendments of 1988. The items added include the numbers of school districts receiving basic and concentration grants; the schools operating Chapter 1 programs; public and non-public students eligible to participate in Chapter 1; participants who are handicapped or limited English proficient; school districts and schools subject to school program improvement provisions; schools operating schoolwide projects; and school districts operating innovation projects.

430 STUDY: A DESCRIPTIVE STUDY OF SERVICES FOR LIMITED ENGLISH PROFICIENT STUDENTS

TITLE: A Descriptive Study of Services for Limited English Proficient Students. Study Working Paper: A Review of the Literature.

AUTHOR: Zehler, Annette M.

YEAR: 1991 CONTRACT #: LC91003001

ORGANIZATION: Development Associates, Inc.

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

This literature review was to serve as a guide for developing a research design for the Descriptive Study of Services for Limited English Proficient (LEP) students, to update information on the numbers and types of language minority LEP students being served and on the nature of the services being provided, and to examine factors to be considered in the design of the study.

METHODOLOGY:

The methodology was to examine demographic and other statistics related to changes in the student population, the need for services, and funding sources for special services for LEP students. This review also contains descriptions of the characteristics of LEP students and services provided and reviews research and practice related to effective instruction and implications for services.

SUMMARY:

The review includes an overview of legislation, federal funds for LEP students, and the types of instructional services provided to LEP students. It also includes discussion of research on the LEP student population including numbers, identification, and background characteristics and research on effective instructional practices. The findings of the review are summarized in terms of their implications for the study design.

RECOMMENDATIONS:

Types of variables that should be included in the description of services for LEP students are quality of instruction (coherence, use of challenging content and higher order thinking skills, relevance of instruction to students' background, active participation) and contexts for instruction/learning (school, class, home, community).

44.0 STUDY: A REVISED ANALYSIS OF THE SUPPLY OF BILINGUAL AND ESL TEACHERS: AN ANALYSIS OF SCHOOLS AND STAFFING SURVEY DATA

TITLE: A Revised Analysis of the Supply of Bilingual and ESL Teachers: An Analysis of Schools and Staffing Survey Data

AUTHOR: Pelavin Associates, Inc.

YEAR: 1991 CONTRACT #: None specified

ORGANIZATION: Pelavin Associates, Inc.

APA: Y FINDINGS: T

OBJECTIVES:

The objectives were to provide information about the supply of bilingual education and ESL teachers; the demographic characteristics, educational experience, and qualifications of bilingual and ESL teachers; and the provision by school districts of incentive pay or free training to bilingual and ESL teachers.

METHODOLOGY:

Data sources included the 1987-88 Schools and Staffing Surveys (SASS) and Public School Teachers Questionnaire.

SUMMARY:

This study provided information on the supply and characteristics of bilingual education and ESL teachers, and of pay and training offered to them by school districts. Comparisons were made among bilingual, ESL, and other teachers in terms of demographics, education, teaching experience, teaching assignment, and incentive pay and free training.

RECOMMENDATIONS:

Implications and future research should find out what the bilingual/ESL teachers' primary assignment actually is, and define bilingual/ESL teachers more broadly, using secondary teaching assignment to label teachers. Class period assignments could be scanned to identify teachers teaching 1-2 bilingual/ESL classes per day, and teaching qualifications could be expanded to include the 1st and 2nd subject area that the teacher is most qualified to teach.

45.0 STUDY: AN ANALYSIS OF TITLE VII STATE EDUCATION GRANT REPORT REQUIREMENTS

TITLE: An Analysis of Title VII State Education Grant Report Requirements: Interim Report (Draft)

AUTHOR: Atlantic Resources Corporation

YEAR: 1991 CONTRACT #: T290010001

ORGANIZATION: Atlantic Resources Corporation

APA: N FINDINGS: A,S

OBJECTIVES:

The objectives were to summarize the interim results of an analysis by assessing the quality and completeness of Title VII State Education Agency (SEA) grant report requirements in light of existing statutory and regulatory requirements, the usefulness of the report requirements to the Title VII program, and the feasibility of SEA collection of other related types of information.

METHODOLOGY:

The methodology included reviews of annual SEA reports for FY 1988 and FY 1989 and reviews of contractor produced compilations of data for FYs 1985-86, 1986-87, and 1987-88 to determine the extent of the quality, completeness, and comprehensiveness of the Title VII reporting requirements. Interviews were conducted with OBEMLA staff to assess staff perceptions relative to reviews of reported information and to identify data needs not currently being met. A SEA telephone survey (to 15 states) was used to obtain comments on current and potential data collection requirements. Data were entered into a text data base for question-by-question retrieval and analysis.

SUMMARY:

A variety of methods of data collection are used by SEAs to fulfill the reporting requirements Findings indicate a lack of standard definitions (e.g., for key terms such as "limited English proficient") which limits the extent to which findings can be compared. The study also found incomplete and inconsistent data on LEP students and LEP programs across states and identified specific concerns with report requirements.

RECOMMENDATIONS:

To implement SEA reporting requirements in PL 100-297, OBEMLA should determine precisely what coverage of LEP students and LEP programs it seeks and define these areas. OBEMLA should develop a common definition of LEP, a common reporting form for SEAs, and a common measure of educational condition. These requirements should gradually be implemented over 2-3 years. Additionally, some data should be added to existing SEA reporting requirements, and SEA reporting requirements should be defined and clarified so they can be incorporated into new systems. Lastly, OBEMLA should designate an SEA representative to work with SEAs in collecting required data.

46.0 STUDY: A DESCRIPTIVE STUDY OF SIGNIFICANT FEATURES OF EXEMPLARY SPECIAL ALTERNATIVE INSTRUCTIONAL PROGRAMS

46.1 TITLE: Appendix to Draft Final Report: A Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs. Volume 1: Report for Researchers

AUTHOR: Tikunoff, William J.; Ward, Beatrice A.; van Broekhuizen, L. David; Romero, Migdalia; Castaneda, Lillian Ve; .; Lucas, Tamara; Katz, Anne

YEAR: 1991 CONTRACT #: T288001001

ORGANIZATION: Southwest Regional Educational Laboratory

APA: Y FINDINGS: S, A, I, T

OBJECTIVES:

As an appendix to the Draft Final Report, the purpose of this document was to provide supplementary data on the sample selection process, the site description protocols for nine exemplary SAIPs, portraits of exemplary SAIPs, and the training and schedules for data collectors.

METHODOLOGY:

This Appendix is comprised of case study reports and site description protocols.

SUMMARY:

To be selected as an exemplary SAIP, a program must have met the definition of an SAIP as stated in the Request for Proposal and had to demonstrate that LM-LEP students in the program were making exceptional progress academically and in English language development. Site description protocols were also included in the report, as well as extensive case study reports on the nine exemplary SAIPs. Training information for data collectors and copies of original documents and data collection instruments are included.

46.2 TITLE: Final Report: A Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs

AUTHOR: Tikunoff, William J.; Ward, Beatrice A.; van Broekhuizen, L. David; Romero, Migdalia; Castaneda, Lillian Vega; Lucas, Tamara; Katz, Anne

YEAR: 1991 CONTRACT #: T288001001

ORGANIZATION: Southwest Regional Educational Laboratory

APA: Y FINDINGS: S,A,I,T

OBJECTIVES:

The objectives were to conduct a descriptive study of exemplary SAIPs serving language minority LEP students in elementary or secondary schools, with a secondary emphasis on LEP students in preschool, and to identify and describe the features of nine SAIPs known for producing positive student outcomes.

METHODOLOGY:

The methodology included 36 classroom observations (13 elementary, 21 Junior high and 12 high school classrooms). Nine SAIPs were selected by a panel of five experts who reviewed nominations and site description forms completed before visits and on-site. Data collection included classroom observations and survey questionnaires. Qualitative and quantitative statistical procedures were used to analyze data, and a factor analysis of the description of the instructional practices profile form was completed.

SUMMARY:

The study identified and described the location, funding source, context, and parent involvement and outreach activities of the nine SAIPs known for producing positive student outcomes. Thirty-three instructional practices were found in the research to be typical of effective instruction. Significant features of exemplary SAIPs were listed at the administrative, program, and instructional levels.

RECOMMENDATIONS:

The generalizability of this study should be limited to instructional programs for LEPs possessing program and context characteristics similar to those in the study. Although SAIP support is needed at all age levels, it should not supplant bilingual education or other programs for LEPs. When designing SAIPs, districts must be prepared to make a full range of changes to carry out all necessary restructuring, and flexibility in program decisions should be maintained, especially with monitoring progress and reassigning to higher English language proficiency levels. Programs should be staffed with strong content area teachers, and staff development in English language development strategies should be provided to all teachers. Further research is needed to establish the range of instructional treatments resulting in desired educational goals for LEPs.

CAVEATS/LIMITATIONS:

The significant features of SAIPs are organized by individual categories in the Final Report but, nonetheless, these are actually highly interrelated. Only nine sites were studied, thus limiting the generalizability of the findings.

46.3 TITLE: Appendix to Final Report: A Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs

AUTHOR: Tikunoff, William J.; Ward, Beatrice A.; van Broekhuizen, L. David; Romero, Migdalia; Castaneda, Lillian Vega; Lucas, Tamara; Katz, Anne

YEAR: 1991 CONTRACT #: T288001001

ORGANIZATION: Southwest Regional Educational Laboratory

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The objectives were to provide supplementary data to the final report of the study.

METHODOLOGY:

This Appendix is comprised of case study reports and site description protocols.

SUMMARY:

The reports from site visits to nine SAIPs provide descriptions of students, staff, curriculum, community involvement, and other features characteristic of exemplary SAIPs. Protocol forms used for data collection are included.

47.0 STUDY: NATIONAL SURVEY OF TITLE VII BILINGUAL EDUCATION CAPACITY BUILDING EFFORTS

47.1 TITLE: Descriptive Analysis of Bilingual Instructional Service Capacity Building Among Title VII Grantees: Phase One Report

AUTHOR: Kim, Yungho; Lucas, Tamara

YEAR: 1991 CONTRACT #: T289006001

ORGANIZATION: ARC Associates, Inc.

APA: N FINDINGS: A

OBJECTIVES:

The objectives of the first phase of the National Survey of Capacity Building were to plan and conduct a national survey of Title VII capacity building; provide data to be used in the selection of particularly successful capacity building sites for in-depth study; provide a summary view of the capacity building impact of Title VII grants to the Department of Education.

METHODOLOGY:

The list of study factors to be included in the survey was suggested by OBEMLA and refined on the basis of a review of 100 grant proposals. Draft survey questionnaires were developed and field tested at several sites through the mail or face-to-face interviews. The revised survey questionnaires were sent to project directors, school district superintendents, principals, and SEA directors of bilingual education. Follow-up activities included reminder postcards and telephone calls. Overall response rates were 75% for LEA projects, 97% for SEAs, and 100% for state directors.

SUMMARY:

This Phase One report presented preliminary results of a nationwide survey to describe the capacity building efforts of all instructional projects that received Title VII funds for the 1987-1988 academic year. Findings from project directors, school district superintendents, principals and SEA directors of bilingual education were presented. The conditions most frequently mentioned by all groups as contributing to the success of capacity building efforts were commitment and support by the school board and/or the superintendent, and staff development or training. The condition most frequently mentioned as hindering capacity building was inadequate funds or lack of resources.

47.2 TITLE: Successful Capacity Building: An Analysis of Twenty Case Studies

AUTHOR: Lucas, Tamara; Katz, Anne; Ramage, Katherine

YEAR: 1992 CONTRACT #: T289006001

ORGANIZATION: ARC Associates

APA: N FINDINGS: A

OBJECTIVES:

The objectives of the overall study were to conduct a national survey that described the capacity building status of Title VII funded instructional programs for LEPs and the circumstances that led to that success; to identify and select school districts successful in their capacity building efforts; and to carry out case studies of successful projects. The case study site visit reports (Phase III of the study) are synthesized in this report.

METHODOLOGY:

This report is based on data collected at 20 successful Title VII instructional programs through case study site visits during the spring and fall of 1991. The site visits consisted of interviews, observations, and examination of selected documents. A total of 422 interviews and 88 classroom observations were conducted.

SUMMARY:

The objectives of the "Descriptive Analysis of Bilingual Instructional Service Capacity Building among Title VII Grantees" study were to conduct a national survey that described the capacity building status of Title VII-funded instructional programs for LEPs and the circumstances that led to that success. The case study site visit reports (Phase III of the study) are summarized in this report. Findings indicated that four sets of factors contributed to capacity building: policy-related factors, community and district characteristics, staff characteristics, and strategies.

RECOMMENDATIONS:

The Department of Education should continue to provide Title VII funding to districts for appropriate educational services to all students. SEAs should become active leaders in promoting quality instruction for LEPs through maintaining expert staff and implementing regulations and guidelines. Coordination and shared decision making should occur at all levels with all staff. Districts should communicate with, educate, and involve community members, parents, and non-LEP staff in educational programs and services for LEPs, as well as communicate with school administrators from the inception of the program. In addition, the priority of recruiting, hiring, and training LEP and non-LEP staff should be determined at the district level. The variety of needs of LEP students and families should be addressed through the coordination and collaboration of districts and community agencies serving in that capacity. Additional research should be conducted on factors identified as contributing to capacity building.

47.3 TITLE: Descriptive Analysis of Bilingual Instructional Service Capacity Building Among Title VII Grantees: Final Report

AUTHOR: Kim, Yungho; Lucas, Tamara

YEAR: 1992 CONTRACT #: T289006001

ORGANIZATION: ARC Associates

APA: N FINDINGS: A

OBJECTIVES:

The three objectives of this study included conducting a nationwide survey that described both the capacity building status of Title VII funded instructional programs for LEPs and the circumstances that led to that status; identifying and selecting school districts with Title VII instructional programs which had been successful in their capacity-building efforts; and conducting case studies of these selected school districts.

METHODOLOGY:

Between 1989 and 1992, a national survey was carried out which targeted all Title VII funded instructional projects for the 1987-1988 academic year. Data were collected from Title VII project directors, superintendents, principals, and SEA bilingual education directors. In addition, twenty projects were visited for case-study data.

SUMMARY:

The objectives of this study were to describe both the capacity building status of Title VII-funded instructional programs for LEPs and the circumstances that led to that status; to identify and select school districts with Title VII instructional programs which were successful in their capacity building efforts, and to visit some of the successful projects. Each of the three phases of the study addressed one of these objectives. Findings indicate that the "seed money" provided by Title VII is essential in starting programs. From 39% to 68% of Title VII services were financed by the district. These funds were used for the collection or purchase of LEP instructional materials (68%), classroom aides or tutors (64%), assessment and placement (62%), training and inservice for Title VII program staff (59%), and local development of instructional materials (58%). Providing equal access to LEPs and non-LEPs to the educational services was an important responsibility of the State, although staff at LEA and SEA bilingual offices provided the leadership, support, and structure for program development. Communication and collaboration about LEP students and services with community members, parents, and non-LEP program staff increased the continued support for institutionalizing the program without Title VII funds. Additionally, the attitudes and perceptions of people in the district and community, the hiring and recruitment policies of the district, and the shared decision-making played important roles in the success of capacity building efforts. Strategies employed by successful projects, and obstacles hindering their success, were also reviewed.

RECOMMENDATIONS:

The Department of Education should continue to provide "seed money" for appropriate educational services to all studetns. SEAs can promote district capacity building and quality instruction for LEPs through maintaining expert staff and implementing regulations and guidelines. Districts can promote capacity building through coordination and shared decistion making among superintendents, school board members, principals, school staff, parents, and community members. In addition, the priority of recruiting, hiring, and training LEP and non-LEP staff should be determined at the district level. Superintendents and school board members can promote capacity building through concrete shows of support, such as attendance at LEP program acativities. The case study report from this study (ID# 47.2) can provide Federal, State, and local policy makers with guidance in implementing the factors found to contribute to capacity building.

48.0 STUDY: A REVIEW OF LOCAL TITLE VII EVALUATION AND IMPROVEMENT PRACTICES

48.1 TITLE: A Review of Local Title VII Evaluation and Improvement Practices (Draft Case Study Report)

AUTHOR: Zehler, Annette M.; Willette, JoAnne L.; Young, Malcolm B.; Hopstock, Paul J.; Day, Harry R.; Jones, Earl

YEAR: 1992 CONTRACT #: LC89023001

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: A

OBJECTIVES:

The objectives of this case study report were to provide detailed descriptions of the evaluation systems at 18 representative Title VII projects as part of a larger review of local Title VII evaluation and improvement practices.

METHODOLOGY:

Case study sites were restricted to 200 Title VII projects included in an earlier phase of the study. From this group, 18 projects were selected using a random, stratified process. Stratification variables included quality of plans and reports, type of evaluator and type of project. Two to four day site visits were carried out which include interviews and document reviews.

SUMMARY:

This draft report presents an overview of the evaluation activities at 18 representative Title VII projects, as well as more detailed descriptions of the strengths and weaknesses of the evaluation systems at each site. Findings from site visits revealed an overall dissatisfaction with the Federal regulations' reliance on summative evaluation procedures. Project staff were also concerned with the focus on student achievement test data as the measure of project outcomes. Case study findings indicated several weaknesses in the summative evaluations that were being carried out.

RECOMMENDATIONS:

It was recommended that a process evaluation be included within the Title VII evaluation requirements. Guidelines and assistance to projects in carrying out process evaluation activities should be provided. It was also recommended that more contact and ongoing assistance by evaluators in carrying out evaluation related activities be promoted.

48.2 TITLE: A Review of Local Title VII Evaluation and Improvement Practices (Draft Final Report)

AUTHOR: Hopstock, Paul J.; Young, Malcolm B.; Zehler, Annette M.

YEAR: 1992 CONTRACT #: LC89023001

ORGANIZATION: Development Associates, Inc.

APA: N FINDINGS: A

OBJECTIVES:

The objectives were to review local Title VII evaluation practices. More specifically, to provide a detailed description of the current evaluation practices to Title VII projects; to examine how evaluation results are used by grantees; to determine if evaluations being performed are consistent with federal legislation and regulation; to assess the comprehensiveness and quality of evaluation methods and processes being used; to determine the relationship between evaluator qualifications and quality and utility of evaluations, to examine the use and perceived usefulness of resources provided by ED to improve evaluations; to determine if the quality and usefulness of Title VII evaluations have improved in the past ten years; to identify major problems in federal policy, local practices, evaluator qualifications, training materials, or technical assistance that limit the quality and utility of evaluations; and to make recommendations for improved evaluation practices.

METHODOLOGY:

A file review was conducted of applications and evaluation reports of a stratified random sample of 200 Title VII projects funded in FY 1989. A mail survey was sent to all project directors and evaluators of 655 projects funded in FY 1989, and case studies of the evaluation systems of 18 projects funded in FY 1989 were carried out. Interviews were held with OBEMLA project officers and selected SEA and LEA officials.

SUMMARY:

Findings are summarized under five headings: 1) purposes and uses of evaluation; 2) evaluation of implementation processes and student outcomes; 3) quality and costs of Title VII evaluations; 4) qualifications of evaluators; and 5) evaluation assistance. Complete results of the mail survey of project directors and evaluators are appended. Overall findings suggest that the purposes and uses of Title VII evaluations have not been clearly articulated by the U.S. Department of Education. In general, the quality of evaluation reports range from "poor" to "adequate".

RECOMMENDATIONS:

Recommendations related to the monitoring of project evaluations were to establish a centralized tracking system, make funding contingent on receipt of a report, assign responsibility of assessing reports to EACs, require cover summary sheets, and establish a database. Other recommendations were to revise and clarify evaluation requirements; redirect the Evaluation and Research Agenda to include process evaluation; place greater emphasis on evaluation in the grant review process and budget; and expand the role of OBEMLA in the selection of evaluators by developing and publishing standards for evaluators and a roster of experienced evaluators.

49.0 STUDY: MATHEMATICS AND MIDDLE SCHOOL STUDENTS OF MEXICAN DESCENT: THE EFFECTS OF THEMATICALLY INTEGRATED INSTRUCTION

TITLE: Mathematics and Middle School Students of Mexican Descent: The Effects of Thematically Integrated Instruction

AUTHOR: Henderson, Ronald W.; Landesman, Edward M.

YEAR: 1992 CONTRACT #: R117G10022

ORGANIZATION: National Center for Research on Cultural Diversity and Second Language Learning

APA: N FINDINGS: I

OBJECTIVES:

The objectives were to examine the effects of thematically organized instruction in mathematics, to describe student attitudes relevant to mathematics, to test hypotheses regarding the relationship of motivational variables to mathematics outcomes, and to examine some of the special difficulties within a thematic approach of providing comprehensive coverage of topics designated for the middle school curriculum.

METHODOLOGY:

This was a two year study. In year one, 102 7th graders were in experimental and control groups and randomly assigned to experimental groups. In year two, no random assignment took place. Pre- and post-tests were administered in Spanish and English to assess computational skills, concepts, and applications. An attitudinal measure using a 4-point Likert scale was given. It was based on the Fourth National Assessment of Educational Progress/Attitudes toward Math and Other School Subjects. Motivational self-perceptions were also investigated. Instructional themes were chosen by students and teachers.

SUMMARY:

This study examined the effects of thematically organized instruction in mathematics for at-risk, middle school students of Mexican descent. Both the theme and comparison groups made equivalent gains in computational skills, but the theme groups surpassed controls in achievement on mathematical concepts and applications. Student motivation was not differentially affected by the type of instruction, but motivational variables predicted achievement outcomes for both groups.

50.0 STUDY: DESCRIPTIVE STUDY OF THE FAMILY ENGLISH LITERACY PROGRAM

TITLE: Descriptive Study of the Family English Literacy Program: Executive Summary

AUTHOR: Atlantic Resources Corporation

YEAR: 1992 CONTRACT #: None specified

ORGANIZATION: Atlantic Resources Corporation

APA: N FINDINGS: S,T,A,I

OBJECTIVES:

The purpose of this study was to describe the Title VII Family English Literacy Programs funded from 1985-1989. Descriptive information included in the report reflects instruction, program structure and organization, staff, participants, curriculum, recruitment and retention strategies, and program benefits.

METHODOLOGY:

A questionnaire was completed by project directors through a field test (3 projects), mail (36 projects), or site visit (15 projects). Selection criteria for the sites to be visited included language groups served and regional distribution. Telephone follow-up was conducted as needed on the mail questionnaire. A second questionnaire was developed to obtain information from a sample (300) of Family English Literacy projects participants. Interviews were conducted in the participants' native language. The study reported a 96% completion rate on the questionnaires.

SUMMARY:

The purpose of this study was to describe the Title VII Family English Literacy (FEL) Programs funded from 1985-1989. During the three year period of the study (1989-1992), descriptive information was collected on instruction, program structure and organization, staff, participants, curriculum, recruitment and retention, and program benefits. Findings indicated that word of mouth was the most effective recruitment technique. 60% of the participants enrolled in FEL programs to learn or improve their English, and benefits of the program included English literacy skills and involvement in their children's education. Features of the projects which most contributed to participant growth and progress included bilingual staff; intergenerational focus; opportunity for families to work together; accessibility to project instruction, child care, and/or transportation; and the importance of helping parents realize their significance to their children's education. Project directors considered the parents' involvement in their education, their improved English, literacy, and parenting skills, and their increased self-esteem and confidence as important project achievements.

RECOMMENDATIONS:

An evaluation of the FELP would require consistent data across all projects. Project directors need to be told what data is required, such as attendance records, participants' names, participant progress, test results, children's gains and other outcome indicators. Improving federal policy in the area of family English literacy might involve better coordination among Federal programs or developing a technical assistance network which would allow project directors to meet and interact regularly regarding problems and successes.

51.0 STUDY: NATIONAL STUDY OF THE ESEA TITLE VII BILINGUAL EDUCATION PERSONNEL TRAINING PROGRAM

TITLE: A National Study of the ESEA Title VII Bilingual Education Personnel Training Program: Final Report

AUTHOR: Riccobono, John A.; Holley, Judy A.; Thorne, Judy M.; Silvia, E. Suyapa

YEAR: 1992 CONTRACT #: T289011001

ORGANIZATION: Research Triangle Institute

APA: N FINDINGS: T, A

OBJECTIVES:

The objectives were to collect descriptive information on Title VII-funded training programs at 4-year colleges and universities that certify, endorse and grant degrees and that were operating during 1990-91. The status of graduates of these programs was also assessed.

METHODOLOGY:

Four national surveys were conducted with directors of Title VII bilingual projects, key faculty, currently enrolled students with Title VII support, and graduates since 1985 (through a mail survey to those that could be identified). Twenty individual projects were selected for site visits.

SUMMARY:

This is a final report of descriptive information collected on 1990-1991 Title VII-funded training programs at 4-year colleges and universities. These programs certified, endorsed, and granted degrees to educational and teacher training personnel and provided supplementary training for already certified education personnel. The study also reported post-graduation status of participants (i.e., type of position, degree of satisfaction with job). Findings indicated that projects differ in terms of degree offered and approach to the philosophy of educating limited English proficient students. Students selected for the Title VII programs are primarily recruited through public or private school district recommendations. Thus, Title VII projects focus on retraining or supplemental training because of the growing need for bilingual teachers. Upon graduation, most participants have positions as educational professionals, with some of them serving limited English proficient children.

RECOMMENDATIONS:

ED should re-examine record-keeping requirements for Title VII grantees at national and individual levels. The 3-year grant period should be re-examined to determine its sufficiency for enabling grantees to achieve positive outcomes. Project evaluations should be given a higher priority. A follow-up study should be conducted in 1993-94 to address questions not considered because of the sampling frame used.

52 0 STUDY: LANGUAGE CHARACTERISTICS AND ACADEMIC ACHIEVEMENT: A LOOK AT ASIAN AND HISPANIC 8TH GRADERS IN NELS:88

TITLE: Language Characteristics and Academic Achievement: A Look at Asian and Hispanic Eighth Graders in NELS:88

AUTHOR: Bradby, Denise; Owings, Jeffrey; Quinn, Peggy

YEAR: 1992 CONTRACT #: None specified

ORGANIZATION: MPR Associates; National Center for Education Statistics

APA: Y FINDINGS: S

OBJECTIVES:

The purpose of this study was to examine some of the factors that influence the academic achievement of Asian and Hispanic 8th grade students.

METHODOLOGY:

Data from the National Education Longitudinal Study of 1988 (NELS:88) were used to make comparisons among students on basic demographic information, such as ethnicity, nativity, and socioeconomic status (SES); teacher and self-assessments of language proficiency achievement test scores; and student aspirations. Students were categorized as language minority (LM) and/or limited English proficient (LEP).

SUMMARY:

The results indicated that about three-fourths of all Hispanic and Asian eighth-graders are classified as language minorities. The proportions of high, moderate and low English proficiency students were consistent across both groups. In general, neither Asian nor Hispanic students of low SES background achieved the basic reading levels. Asian students, however, were more likely to reach the basic math level whether divided by SES, language minority status, or level of English language proficiency. Asian and Hispanic students also differ in their educational outlook and aspirations in that Asian students are more likely to have educational goals beyond high school.

CAVEATS/LIMITATIONS:

Students' self-reported assessment of their English language ability was potentially unreliable. Factors such as low self-esteem could influence their response and many limited English proficient students were excluded from the sample due to very limited English language skills.

53.0 STUDY: AGGREGATION AND ANALYSIS OF THE TITLE VII DATABASE

TITLE: An Aggregation and Analysis of the Title VII LEA Database: Final Report

AUTHOR: AmerInd, Inc.

YEAR: 1992 CONTRACT #: T290011001

ORGANIZATION: AmerInd, Inc.

APA: Y FINDINGS: A

OBJECTIVES:

The objectives were to aggregate and analyze LEA grantee data from FY 1969-90. This included organizing information, transposing the information to hard copy and on-line data base (dbase), carrying out analyses of the information, and devising reports on the major elements.

METHODOLOGY:

More than 10,000 records related to Title VII instructional grant funding were aggregated. Grantee data were ranked by dollars, grants, and dollars/grant received. State data were sorted by FY, ranked by numbers of grantees, grants, dollars, and dollars/grant received. Multifunctional Resource Center (MRC) service area data from FY90 area designations were sorted by FY and ranked as above.

SUMMARY:

The Title VII legislative history and the process used for aggregating funding data are explained in this report. An aggregation and analysis of Title VII grantee data is provided for FY69-90 by grantee, State and MRC area and presented by number of grants reserved and by amount of obligated funds.

CAVEATS/LIMITATIONS:

Statistics were not adjusted for inflation.

54.0 STUDY: SCHOOLS AND STAFFING IN THE U.S.: A STATISTICAL PROFILE, 1987-88

TITLE: Schools and Staffing in the United States: A Statistical Profile, 1987-88

AUTHOR: Choy, Susan P.; Medrich, Elliot A.; Henke, Robin R.; Bobbitt, Sharon R.

YEAR: 1992 CONTRACT #: None specified

ORGANIZATION: MPR Associates, National Center for Education Statistics

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The objectives were to profile the public and private school teaching force, to provide estimates and projections of teacher supply and demand, to allow analysis of teacher turnover and mobility, to enhance assessments of teacher quality and qualifications, and to provide information on school policies and practices and workplace conditions.

METHODOLOGY:

Data from the Schools and Staffing Survey (1987-88) and the Teacher Followup Survey (1988-89) were analyzed. Stratified samples (by state, grade level, and other categories) of public and private schools and teachers were obtained. Questionnaires to school districts, schools, administrators, and teachers were completed with telephone follow-ups. Likert-type scales were used on the questionnaires. Factor analyses and t-tests were performed on the data. All data were reported by school characteristics, type of community (urban-rural), percent of minority enrollment, school size, and state.

SUMMARY:

The report profiled the nation's public and private schools and students, and described the teachers, principals, and others who make up the school work force as well as their working conditions in the schools. Other issues addressed included salaries and benefits, attitudes toward school policies and practices, professional satisfaction, and teacher supply, demand, shortages, and turnover.

55.0 STUDY: DESCRIPTIVE STUDY OF THE CHAPTER 1 MIGRANT EDUCATION PROGRAM

55.1 TITLE: Descriptive Study of the Chapter 1 Migrant Education Program. Volume I: Study Findings and Conclusions

AUTHOR: Cox, J. Lamarr; Burkheimer, Graham; Curtin, T.R.; Rudes, Blair; Iachan, Ronaldo; Strang, William; Carlson, Elaine; Zarkin, Gary; Dean, Nancy

YEAR: 1992 CONTRACT #: LC88025011

ORGANIZATION: Research Triangle Institute

APA: N FINDINGS: S,A,I

OBJECTIVES:

The objectives were to develop a description of the Migrant Education Program (MEP) that is current and nationally representative in terms of characteristics of students served, program staffing, state and local practices for targeting of services, program administration, program services, and program expenditures.

METHODOLOGY:

The methodology included mail questionnaires, student records review, and interviews. Forms were developed for the State Project Questionnaire, Local Project Questionnaire, Basic Student Form, Site Observation Record Form, and Intensive Case Study Reports.

SUMMARY:

The Descriptive Study of the Chapter 1 Migrant Education Program is reported in three volumes. Volume 1 reported the study findings and conclusions, providing a description of the Migrant Education Program (MEP). Findings included the characteristics of the students served, services provided, communications, administration, and expenditures. The authors noted that some federal requirements and economies of scale (where there are low concentrations of migrant students) limit flexibility in the provision of services.

RECOMMENDATIONS:

Recommendations included establishing greater priority to promote services to currently migrant children and considering the promotion of improved targeting at state and local levels. Because programs may be relying too heavily on pull-out and aides, other modes of service such as whole class and extended day instruction should be considered. Serious attention should be given to the use of the Migrant Student Record Transfer System (MSRTS) as a means of tracking student placement and status, and incentives to encourage local MEP providers to use MSRTS should be examined.

CAVEATS/LIMITATIONS:

The requirement that needs assessments for local MEP project funding must be carried out one year in advance of offering services can limit the flexibility of some projects to provide services that fully address the needs of their students. Economies of scale limit the flexibility of MEP projects to provide needed services in grades and schools with low concentrations of migrant students. In the regular school year, currently migrant students are almost twice as likely not to receive regular Chapter 1 services because they were enrolled in a school or grade that did not offer these services (32 percent) than were regular school year, formerly migrant children (18 percent).

55.2 TITLE: Descriptive Study of the Chapter 1 Migrant Education Program. Volume II: Summary Reports of Intensive Case Studies (Final Report)

AUTHOR: Strang, William; Carlson, Elaine; Burkheimer, Graham; Cox, J. Lamarr; Curtin, T.R.; Funkhouser, Janie; Gutmann, Babette; Henderson, Allison; Moore, Mary; Muraskin, Lana

YEAR: 1992 CONTRACT #: LC88025001

ORGANIZATION: Research Triangle Institute; Westat, Inc.

APA: N FINDINGS: S,A,I

OBJECTIVES:

The objectives were to study 25 local migrant projects in-depth to provide qualitative data to inform the survey findings, address major policy issues, and explore the merits of particular quantitative variables. The overall objectives are the same as in Volume I: to develop a description of the Migrant Education Program (MEP) that is current and nationally representative in terms of characteristics of students served, program staffing, and state and local practices for targeting services and program administration, services, and expenditures. The study provides descriptions of projects, shows variation in approaches, and provides a context for survey results.

METHODOLOGY:

Twenty-five local intensive case study projects (14 regular term, 11 summer projects) were selected from 6 states, including one sending and one receiving state in each of the three migrant streams: eastern, central, and western. Case studies were selected from all projects included in the sample of local projects selected for the overall study in these six states. State directors of migrant education nominated the projects. Data collection included site visits by 1 or 2 researchers and interviews with local migrant project directors, recruiters, Migrant Student Record Transfer System (MSRTS) staff, school principals, migrant teachers, general education teachers, special education personnel, Chapter 1 personnel, bilingual/ESL personnel, and others. The themes of the interviews were targeting services, communication, administration, expenditures, and site visitors. Researchers also reviewed documents and observed instructional and support activities.

SUMMARY:

Case study reports are presented for the projects which were visited. The reports provide a portrait of Migrant Education programs, including data on students and targeting, program services, communication and coordination, expenditures, and administration.

RECOMMENDATIONS:

Recommended uses of case study data are to interpret survey results; to provide examples of service delivery methods, recruitment, or coordination techniques for replication by other projects; to stimulate discussion about the migrant education program; and to feed the research agenda by raising programmatic issues.

CAVEATS/LIMITATIONS:

Case study sites were not selected to be representative of all migrant projects or even of migrant projects within a state or stream. These data are not generalizable to other projects. Data relating to LEP migrant students were collected incidental to the other objectives of the study.

56.0 STUDY: COMPARATIVE STUDY OF TEACHERS' BELIEFS ABOUT READING ASSESSMENT WITH LATINO LANGUAGE MINORITY STUDENTS

TITLE: A Comparative Study of Teachers' Beliefs about Reading Assessment with Latino Language Minority Students

AUTHOR: Rueda, Robert; Garcia, Erminda

YEAR: 1992 CONTRACT #: None specified

ORGANIZATION: National Center for Research on Cultural Diversity and Second Language Learning

APA: N FINDINGS: T

OBJECTIVES:

The objectives were to investigate the beliefs, understandings, and everyday practices of teachers as these relate to the assessment of language minority students especially in the area of reading; to find out teachers' beliefs about reading assessment with Latino students; to find out if these beliefs vary by professional training and affiliation; and to find out if these beliefs correspond with classroom practices.

METHODOLOGY:

The methodology included a literature review on current perspectives on teachers' beliefs in general, and specifically on assessment, literacy, reading, bilingualism/biliteracy, and learning problems. Data were collected through in-person interviews and written surveys with 18 special education, bilingual-waivered teachers, and bilingual credentialed teachers in Southern California. There were also classroom observations of 12 teachers. The interview data were transcribed, analyzed, and coded, and an exploratory factor analysis was conducted on the survey.

SUMMARY:

This study investigated teachers' beliefs, understanding, and everyday practices related to reading assessment with a focus on Latino students. Results showed that the special education teachers are generally more oriented toward a reductionist/skill transmission approach to models of reading, instructional reading practices, and reading assessment. Both types of bilingual teachers, on the other hand, were more oriented toward a holistic/integrative perspective on these components.

RECOMMENDATIONS:

Successful implementation of new educational initiatives must consider the teachers' existing belief systems.

57.0 STUDY: BILINGUAL EDUCATION STRATEGIES

TITLE: Assessing Evaluation Studies: The Case of Bilingual Education Strategies

AUTHOR: Meyer, Michael M.; Fienberg, Stephen E. (Eds.)

YEAR: 1992 CONTRACT #: None specified

ORGANIZATION: National Research Council

APA: N FINDINGS: I

OBJECTIVES:

The objective was to review and assess the methodology of data collection and analysis of two studies, the National Longitudinal Study of the Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students (1989) and the Longitudinal Study of Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language Minority Children (1991).

METHODOLOGY:

Methodology included reviewing logical and technical methods of data collection and data analysis and assessing the need for additional analysis.

SUMMARY:

Summaries of the reports of the two studies are provided, which follow extensive critiques of the studies. Overall, the review concluded that the study designs were not appropriate for answering the policy questions from which the studies developed. Both studies suffered from a lack of documentation regarding study objectives, operationalization of conceptual details, procedures followed, and changes in all of these areas from what was originally proposed. Elaborate statistical methods were used in order to surpass problems with the research designs. However, they were unsuccessful in doing so, and additional analyses using these data would not address the intent of the study. No clear findings surface from either study, although findings did indicate the importance of instruction in the student's primary language for second-language achievement in language arts and mathematics.

RECOMMENDATIONS:

Recommendations include that no further analysis be carried out of the data from either study. In addition, it was suggested that the data and documentation be archived and made publicly available and that more focused and theoretically driven studies be carried out to analyze the interaction of different instructional approaches in bilingual education contexts.

58.0 STUDY: PROSPECTS: THE CONGRESSIONALLY MANDATED STUDY OF EDUCATIONAL GROWTH AND OPPORTUNITY. THE NATIONAL LONGITUDINAL STUDY OF CHAPTER 1 CHILDREN.

58.1 TITLE: Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity. The National Longitudinal Study of Chapter 1 Children. Technical Report #1: Sampling Procedures for the Baseline and First Follow-up Surveys.

AUTHOR: Bryant, Edward C.

YEAR: 1993 CONTRACT #: None specified

ORGANIZATION: Abt Associates, Inc.

APA: N FINDINGS: 1

OBJECTIVES:

The objectives were to describe sampling design and methods used for the Prospects Study, which will assess the short- and long- term impact of Chapter 1 on students' academic achievement and other measures of school success.

METHODOLOGY:

The general sample frame was developed from the General Education Participation Act for 1989 (Chapter 1 dollars allocated), the 1980 U.S. Census (poverty measures for school district areas covered), and the 1989 Quality Education Data files (to construct a total pool of schools and districts).

SUMMARY:

Sampling design procedures are described and explained for selecting districts, schools, and LEP students in grades 1, 3, and 7.

58.2 TITLE: Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity: Interim Report

AUTHOR: Puma, Michael; Jones, Calvin C.; Rock, Donald; Fernandez, Roberto

YEAR: 1993 CONTRACT #: LC91029001

ORGANIZATION: Abt Associates, Inc.

APA: Y FINDINGS: S,T,A,I

OBJECTIVES:

The purpose of the five year longitudinal study is to evaluate the short- and long-term consequences of Chapter 1 participation by following national samples of public school children who were in 1st, 3rd, and 7th grades in 1991. The Interim Report provides a descriptive one-year snapshot (1991-92 school year) of student characteristics from three perspectives. The first perspective focuses on economic disadvantagement by examining student and school characteristics within schools with very high concentrations of poor children. The second examines the characteristics of educationally disadvantaged children who receive compensatory education services. The third perspective focuses on the characteristics and compensatory services of limited English proficient students.

METHODOLOGY:

The methodology included a multi-stage research design moving from school districts to schools to students. Six observations will be held over five years of each of the grade levels (1st, 3rd, 7th). Some overlap in grade level comparisons is anticipated. Naturally occurring comparison groups will be used. Surveys are being carried out with students, families, administrative and instructional staff. Students' school records are also being reviewed for information on participation in local, state, and federally supported programs. Students were selected using a nationally representative sample from four census regions and for three levels of urbanization (rural, urban, suburban).

SUMMARY:

This Interim Report provides a description of student characteristics for students in grades 1, 3, and 7 over the 1991-92 school year, especially regarding Chapter 1 participation. Differences are reported for students from low poverty schools versus students from high poverty schools on a number of demographic, instructional, teacher, and administrative components.

CAVEATS/LIMITATIONS:

Naturally occurring comparison groups versus random assignment will be used for the sample. Although information from the students' teachers and school files are being collected, only Spanish translations of survey questionnaires given to students and teachers will be available. Therefore, other language minority groups will be missed. In addition, estimates of the numbers of language minority LEP students may have higher sampling variances for 7th graders than for 1st and 3rd graders. Data on language minority LEP students are preliminary, as are all other data in this report.

590 STUDY: FALL 1990 ELEMENTARY AND SECONDARY SCHOOL CIVIL RIGHTS SURVEY

591 TITLE: Fall 1990 Elementary and Secondary School Civil Rights Survey: District Summary Vol. 1

AUTHOR: DBS Corporation

YEAR: 1993 CONTRACT #: CA91001001

ORGANIZATION: DBS Corporation; Opportunity Systems, Inc.

APA: Y FINDINGS: S

OBJECTIVES:

The objectives were to provide a national and state summary of projected total numbers of students and projected numbers of students in specific categories by racial/ethnic group and gender.

METHODOLOGY:

The methodology used included summarizing data from the 1990 Elementary and Secondary School Civil Rights Survey.

SUMMARY:

A summary of enrollment projections for all students and for students in specific categories (such as specific learning disabilities, in need of language assistance, enrolled in language assistance, and gifted and talented) are provided. Projections are based on data summarized from the Fall 1990 Elementary and Secondary School Civil Rights Survey. Figures are provided by racial/ethnic group and gender.

59.2 TITLE: Fall 1990 Elementary and Secondary School Civil Rights Survey: Revised National Statistical Estimates. Part I, User's Guide for National Estimates

AUTHOR: DBS Corporation

YEAR: 1993 CONTRACT #: CA91001001

ORGANIZATION: DBS Corporation; Opportunity Systems, Inc.

APA: Y FINDINGS: S

OBJECTIVES:

The objectives were to develop national estimates of reported and projected enrollment data for the Nation.

METHODOLOGY:

Estimations are based on the Fall 1990 Elementary and Secondary School Civil Rights Survey. Some of the 12 variables in the original survey were adjusted. Estimations are provided by racial/ethnic group and gender for each of the variables.

SUMMARY:

National estimates are provided for projected school enrollment for grades Pre-K to 12 by racial/ethnic group and age. Estimates are provided for students with specific learning disabilities or multiple handicapping conditions or who are in need of language assistance, enrolled in language assistance programs, gifted and talented, educable mentally retarded, trainable mentally retarded, corporal punishment, or speech impaired.

60.0 STUDY: BILINGUAL BEGINNINGS: AN EVALUATION OF THE TITLE VII SPECIAL POPULATIONS PRESCHOOL PROGRAM

TITLE: Bilingual Beginnings: An Evaluation of the Title VII Special Populations Preschool Program. Final Report

AUTHOR: Brush, Lorelei; Sherman, Renee; Herman, Rebecca; Webb, Lenore

YEAR: 1993 CONTRACT #: 300-87-0102

ORGANIZATION: Pelavin Associates, Inc.

APA: N FINDINGS: I, T

OBJECTIVES:

The purpose of this evaluation was to describe the characteristics, strengths, and weaknesses of the 30 preschool projects funded under the Bilingual Education Special Populations Program during FY 1990.

METHODOLOGY:

A file review was conducted for all projects in their first year of operation and two second-year projects outside the continental United States. The remaining projects received a file review and a telephone interview or site visit. The findings in this report were based on fifteen of the projects that received a telephone interview or site visit. Research questions focused on 6 areas: project goals, project operation and services, project staff, educational and community linkages, participant evaluation and fiscal operations.

SUMMARY:

The fifteen projects reviewed represented a wide variety of bilingual philosophies and programs, differing in such characteristics as the amount of English language used for instruction and the type of students enrolled. There were wide variations in funding, with the total funds granted to the projects ranging from $57,919 to $304,421. Despite these differences, projects showed several similarities. The majority of students served were eligible for free breakfast and/or lunch. Every project was staffed by an administrator and a combination of teachers and aides. All staff members provided inservice training. Each project had an active parent component and links to schools or other community organizations. Every project reported gains in student acquisition of English language skills. Areas of concern included low LEP student enrollment, with staff in a number of projects reporting difficulties in the recruitment of LEP children.

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APPENDIX C:

Overview of Methodologies in Federally Funded Research Studies

Overview of Methodologies in Federally Funded Research Studies

Since 1980, the Department of Education has funded several major research studies of national significance as well as a much larger number of more limited studies concerning the education of language-minority limited-English-proficient students. Through its research funding, the Department has supported research studies[1] focused (depending on the study) upon students, schools, projects, programs, or districts. These studies of LEP students (as they will be termed collectively) have sought answers to vexing pedagogical, political, and practical questions.

This section is concerned with describing the methods implemented in the research funded by the Department since 1980. To accomplish this objective within reasonable time and resource constraints, we have taken a broad-brush approach; general similarities and major distinctions have been our focus, not the myriad small differences between studies. Other reviews, such as Meyer and Fienberg (1992, 57.0), have provided a more detailed look at a few of the studies included here; readers who wish an in-depth discussion are referred to those reviews.

Federally Funded Research Studies

Since 1980, the federal government, primarily through one or another agency of the U.S. Department of Education, has funded approximately 17 significant research studies of bilingual education practices. Our criteria for including a study in this review were whether the study was designed (1) to provide information about LEP students or educational practices for them, either as the primary or as a significant secondary aspect of the study, (2) was funded by the federal government in 1980 or subsequently, and (3) was included within the list of projects provided by OBEMLA for the larger literature review activity. Many reports listed by OBEMLA were not included in this research review because their purposes did not include developing and presenting information about LEP students or educational practices related to them. These 17

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[1]We use "research study" as a generic term encompassing several terms that are sometimes used more narrowly, including descriptive studies, evaluations, exploratory studies, policy research, and research itself.

not included in this research review because their purposes did not include developing and presenting information about LEP students or educational practices related to them. These 17 studies and significant research reports produced by them that were reviewed for this analysis are presented in Addendum 1 to this appendix.[2]

The remainder of this section describes the 17 studies by selected aspects of their research designs, such as research objectives and sampling and data collection plans. Some aspects of the studies are presented in terms of the actual execution of the studies rather than their plans; for example, in several cases, the studies' analysis plans could not be executed because data requirements could not be met. To begin with, we present a very general picture of the types of studies funded by the federal government since 1980.

Classifying Research Studies

We classified federally funded research studies into three general categories that reflect the level the study focused upon (whether the study focused on LEP students or on another level), and whether it involved research designed specifically to develop information concerning LEP students or was designed for other purposes. The first category includes studies that (1) were designed specifically to develop information about the education of LEP students, and (2) are focused directly upon students. The second category also includes studies that (1) were designed specifically to develop information about the education of LEP students, but (2) have other levels, such as bilingual education projects, as their focus. The third category includes all the studies that, whether as a by-product or afterthought, provide information concerning the education of LEP students even though that was not the studies' primary purposes.

Table C1 presents our categorization of the 17 studies. We placed 7 studies, including the Department's two major LEP-related longitudinal projects, in the first category because each

[2]The grouping of these reports under these 17 studies is somewhat arbitrary, as some of the reports were written under separately funded contracts. For example, the Burkheimer et al. (1989) report on the reanalysis of data from the national longitudinal study of LM-LEP students was prepared under a separate competitive procurement.

of them had an explicit goal of developing information about LEP students and a focus on generating information at the student level. Six studies are placed in the second category because they focused on other, non-student levels, specifically projects and districts, but are very much designed to develop information concerning the education of LEP students. Three of the studies we reviewed were placed into the third category; the three involve research about closely related programs that serve some LEP students as well as many EP students, such as the Chapter 1 Migrant Education Program or the regular Chapter 1 program. Certainly many other federally funded studies, including the major general-purpose longitudinal projects of the National Center for Education Statistics (including the National Education Longitudinal Study of 1988--NELS:88) could have been included in this final category. They were excluded because major reports looking at LEP-related questions have not yet been written.

Based on this categorization, it appears the federal government has had a broad perspective on the information needed about the education of LEP students. Both the students themselves and the educational governance levels (e.g., projects or schools) have served to define the levels of the studies.

TABLE C1

Three Categories of Federally Funded Research Concerning the Education of LEP Students		
Specifically Designed to Develop Information Concerning the Education of LEP Students		**III. Not Specifically Designed to Develop Information Concerning Education of LEP Students**
I. Student-Level Focus	**II. Other-Level Focus**	
National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students	National Survey of Title VII Bilingual Education Capacity Building	Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program
Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children	Evaluation of the Title VII Special Population Preschool Program	Descriptive Study of the Chapter 1 Migrant Education Program
National Evaluation of Services for LEP Native American Students	Case Studies of Delivery and Cost of Bilingual Education	Chapter 1 Services to LEP Students
Innovative Approaches Research Project: Partners for Valued Youth Community Knowledge and Classroom Practice Chu'he Konnen: Collaborative Scientific Inquiry in LM Classes Aim for the Best: Assessment and Intervention Model	Significant Bilingual Instructional Features Study	A Comparison of the Effects of Language Background and SES on Achievement Among Elementary School Students
Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs	Descriptive Study of the Classroom Component of the ESEA Title VII Bilingual Education Program	
Teaching Reading to Bilingual Children	Study of Bilingual Instructional Practices in Nonpublic Schools	
Children's English and Services Study		

Study Design

Study designs are often described in terms of whether they are observational, quasi-experimental, or experimental. In this scheme, "observational" study designs take the programs or students as they exist rather than attempting to define and implement specific programs or assign students to programs on some systematic basis. These observational designs permit drawing descriptive conclusions about differences between groups, but since these designs cannot control group membership, they are unable to ensure the treatment is the only relevant difference between group members. In "quasi-experimental" designs, there is an explicit recognition that the treatment is probably not the only relevant difference between "treatment" and "control" groups, and at least a partial behavioral theory exists that indicates what those other differences are so they can be measured and statistically accounted for. In "experimental" designs, the differences beyond treatment are effectively assumed away through random assignment of subjects to specified treatment conditions. Experimental designs are traditionally considered to be preferred to quasi-experimental or observational designs for determining effectiveness of treatments because "[d]eliberate randomization provides an unambiguous probability model on which to base statistical inferences" (Meyers and Fienberg, 1992, **57.0**, p. 19).

Nonetheless, despite the greater potential of experimental or quasi-experimental designs to provide useful information about program effectiveness, all but two of the studies were classified as utilizing an observational study design, including several that were originally designed otherwise. Observational studies rely on existing program situations, such as widely varying models of implementation and non-random assignment of students, and are largely limited to describing the situations as they find them. The two longitudinal studies attempted a greater level of design sophistication, and based on their original study designs, would be classified as quasi-experimental in that they tried to restrict the ranges of program implementation and between-student differences in order to control analytically for at least some of the expected variation. Only two of the independentally designed studies under the umbrella of the Innovative Approaches Research Project began and ended as quasi-experimental designs. None of the reviewed research studies can be described as being based on an experimental design, that is, one in which differences between treatments can be stated and maintained and to which students are

assigned randomly.

The two longitudinal studies, which slipped from the quasi-experimental to the observational category during the courses of those projects, were not the only ones that underwent major design changes between the time they were planned and their final reports. The Descriptive Study of Significant Features of Special Alternative Instructional Programs, which met most of the conditions for a quasi-experimental design in the planning stage, also ended up as an observational study. The study designs for the 17 studies that appeared to be in place at the each of the studies' final reporting stages are summarized in Table C2.

TABLE C2

Final Study Designs Used in Federally Funded Research Concerning the Education of LEP Students	
Design	**Study**
Observational	National Survey of Title VII Bilingual Education Capacity Building Evaluation of the Title VII Special Population Preschool Program Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program Descriptive Study of the Chapter 1 Migrant Education Program Chapter 1 Services to LEP Students National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children Case Studies of Delivery and Cost of Bilingual Education National Evaluation of Services for LEP Native American Students A Comparison of the Effects of Language Background and SES on Achievement Among Elementary School Students Innovative Approaches Research Project-- Cheche Konnen: Collaborative Scientific Inquiry in LM Classrooms Community Knowledge and Classroom Practice Significant Bilingual Instructional Features Study Descriptive Study of the Significant Features of Exemplary Special Alternative Instructional Instructional Programs Teaching Reading to Bilingual Children Children's English and Services Study Descriptive Study of the Classroom Component of the ESEA Title VII Bilingual Education Program Study of Bilingual Instructional Practices in Nonpublic Schools
Quasi-experimental	Innovative Approaches Research Project-- Partners for Valued Youth Aim for the Best
Experimental	

Scope of Research Studies

A study's scope can be described in terms of its geographic range (particularly whether its focus is national or some smaller geographical unit or units) and in terms of the diversity of its subjects (which, when the subjects are students, can involve single or multiple language groups and single or multiple grades). "Subjects," when units other than students are involved, such as districts, can be described in terms of single or multiple levels. Table C3 describes the scope of each of the 17 studies, as originally planned.

Many federally funded studies are designed with a broad scope in mind on all or several of these dimensions, although not all of those studies are able to maintain that wide scope through the life of the study. Other federally funded studies begin with a more modest scope. Based on Table C3, the federal government has tended to fund studies that are national, although national coverage may be more apparent than actual in that locales are often selected purposefully rather than randomly (as noted in a subsequent section) to have sites in major regions. In addition, most of the federally funded studies have tended to be ambitious in terms of targeting multiple language groups, multiple grade levels, and multiple levels of governance despite the complexities those decisions build into studies.

The National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students provides an example of how the scope can narrow through time. At its outset, its scope included students from multiple language groups; by its conclusion, longitudinal analyses covered native-Spanish speakers only. Such restrictions are not unusual in longitudinal research where immense resources must be committed merely to keeping track of the original sample.

TABLE C3

Originally Planned Scope of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	National						Less than National					
	Student Language Groups		Student Grade Levels/Ages		Administrative Units		Student Language Groups		Student Grade Levels/Ages		Administrative Units	
	Single	Multiple	Single	Multiple	Single	Multiple	Single	Multiple	Single	Multiple	Single	Multiple
National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students		X		X		X						
Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children							X		X			X
National Survey of Title VII Bilingual Education Capacity Building						X						
Evaluation of the Title VII Special Population Preschool Program					X							
Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program						X						
Descriptive Study of the Chapter 1 Migrant Education Program				X		X						
Chapter 1 Services to LEP Students												X
Significant Bilingual Instructional Features Study								X		X	X	
Delivery and Cost of Bilingual Education								X		X		X
Children's English and Services Study		X		X		X						
Study of Bilingual Instructional Practices in Nonpublic Schools		X		X		X						

Originally Planned Scope of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	National						Less than National					
	Student Language Groups		Student Grade Levels/Ages		Administrative Units		Student Language Groups		Student Grade Levels/Ages		Administrative Units	
	Single	Multiple	Single	Multiple	Single	Multiple	Single	Multiple	Single	Multiple	Single	Multiple
Descriptive Study of the Classroom Instructional Component of ESEA Title VII		X		X		X						
Teaching Reading to Bilingual Children								X		X		X
National Evaluation of Services for LEP Native American Students		X		X	X							
Descriptive Study of Exemplary Special Alternative Instructional Programs	X		X		X							
Innovative Approaches Research Project--												
Partners for Valued Youth										X		X
Cheche Konnen								X		X	X	
Community Knowledge								X		X	X	
Aim for the Best							X	X		X	X	
Comparison of Effects of Language Background and SES on Achievement		X		X		X						

Sample Designs

The sample designs for the 17 studies are generally closely aligned with their planned scope, as would be expected, as well as with their specific objectives, as will be described in a subsequent section. Here we have described the sampling design only in terms of two dimensions: (1) whether it involves random or purposive selection, and (2) whether the sampling process involves a single stage or multiple stages. Table C4 presents the two-dimensional classification of these studies' sample designs.

We generally found that categorizing by sample designs to be more difficult than for other aspects of the studies, usually because key steps in the process were not described in the reports. As an example, in the Descriptive Study of Exemplary SAIP projects, selection of projects was described in appropriate and sufficient detail to judge the likelihood that the projects were "exemplary." At the same time, the bulk of data collection took place in classrooms and revolved around observation of individual students, but the selection criteria for schools, classrooms, and students were not discussed. Given that most of these studies utilized an observational study design, which should provide for rich descriptive data, the sample designs should have been reported in enough detail to enable readers to judge the extent to which the descriptive findings are applicable to other settings.

Most of the studies had fairly complex, multi-stage sample designs, reflecting their ambitious scopes. Typically, a study would be selecting districts/projects, schools, classrooms, and students through a mix of purposeful and random methods. This complexity adds to difficulties in determining the applicability of the findings.

TABLE C4

Sample Designs of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	Single-Stage		Multi-Stage	
	Random	Purposive	Random	Purposive
National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students			X	X
Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children				X
National Survey of Title VII Bilingual Education Capacity Building				X
Evaluation of the Title VII Special Population Preschool Program		X		
Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program	X	X		
Descriptive Study of the Chapter 1 Migrant Education Program			X	X
Chapter 1 Services to LEP Students			X	X
Significant Bilingual Instructional Features Study				X
Delivery and Cost of Bilingual Education			X	X
Children's English and Services Study	X			
Study of Bilingual Instructional Practices in Nonpublic Schools		X		
Descriptive Study of the Classroom Instructional Component of ESEA Title VII			X	
Teaching Reading to Bilingual Children				X
National Evaluation of Services for LEP Native American Students				X
Descriptive Study of Exemplary Special Alternative Instructional Programs			?	X
Innovative Approaches Research Project-- Partners for Valued Youth Cheche Konnen Community Knowledge Aim for the Best	X	X		X X
Comparison of Effects of Language Background and SES on Achievement			X	

Study Objectives

All but one of the studies (the exception being a reanalysis of data from the Sustaining Effects Study looking at language backgound and socio-economic status) had multiple objectives. All of the studies that were focused on students, regardless of whether they were primarily concerned with the education of LEP students, addressed one or more learner objectives. Further, all of the studies, even those focused on students themselves, addressed one or more other non-student study objectives (e.g., extent of parental involvement). The original objectives of these 17 studies are presented in Table C5 in terms of whether they were learner focused or addressed other, non-learner concerns.

The learner-focused objectives emphasized English proficiency, other academic proficiency, and other student outcomes with little emphasis on native language proficiency. In the category of non-learner objectives, implementation (process) was addressed in all but two studies (i.e., Children's English and Services Study and Comparison of Effects of Language Background and SES on Achievement). This was not unexpected due to the fact that most of the studies were observational and designed to describe a program or process. Of the 17 studies, 10 addressed both learner-focused and non-learner objectives, which reflects the broad intent of many of the studies.

Sometimes study objectives change during the course of a study. Resources may become too limited to carry out all of the planned research, priorities can change, or data may be inadequate. Neither of the longitudinal studies, for example, completed analyses of native language proficiency learner outcomes, leaving only one study reporting those data.

TABLE C5

Original Study Objectives of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	Learner-focused Objectives				Other, Non-Learner Objectives		
	English Proficiency	Other Academic Proficiency	Native Language Proficiency	Other Student Outcome	Cost (or other Input)	Implementation (Process)	Other
National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students	X	X	X			X	
Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children	X	X	X	X	X	X	
National Survey of Title VII Bilingual Education Capacity Building						X	X
Evaluation of the Title VII Special Population Preschool Program				X	X	X	X
Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program					X	X	X
Descriptive Study of the Chapter 1 Migrant Education Program	X	X		X	X	X	
Chapter 1 Services to LEP Students				X		X	X
Significant Bilingual Instructional Features Study						X	X
Delivery and Cost of Bilingual Education					X	X	
Children's English and Services Study	X						X
Study of Bilingual Instructional Practices in Nonpublic Schools						X	X

Original Study Objectives of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	Learner-focused Objectives				Other, Non-Learner Objectives		
	English Proficiency	Other Academic Proficiency	Native Language Proficiency	Other Student Outcome	Cost (or other Input)	Implementation (Process)	Other
Descriptive Study of the Classroom Instructional Component of ESEA Title VII						X	X
Teaching Reading to Bilingual Children	X	X				X	
National Evaluation of Services for LEP Native American Students	X	X	X			X	
Descriptive Study of Exemplary Special Alternative Instructional Programs	X	X		X		X	
Innovative Approaches Research Project--							
Partners for Valued Youth		X				X	
Cheche Konnen		X		X		X	X
Community Knowledge						X	
Aim for the Best		X				X	X
Comparison of Effects of Language Background and SES on Achievement		X					

Data Collection

Data collection in these federally funded studies is driven primarily by the range of objectives set for the study: the more numerous and more complex the objectives, the more extensive and complex its data collection. The most complex and extensive data collection is found in longitudinal studies, although several of the cross-sectional studies involve data collection activities that are almost as extensive. We describe data collection in terms of two characteristics: (1) whether it is longitudinal or cross-sectional (i.e., conducted on a "snap-shot" basis, including situations involving one-time pre- and post-testing), and (2) in terms of the methods used. The latter have been divided further into survey-based and other methods, and those two subdivisions are also split into narrower categories. Data collection for the 17 studies is presented using this descriptive schema in Table C6.

All studies utilized both survey and other data collection methods with the exception of two longitudinal studies that used only other data collection methods (i.e., National Evaluation of Services for LEP Native American Students and Comparison of Effects of Language Background and SES on Achievement). Although similar data collection methods were used in both the cross-sectional and longitudinal studies, some differences were noted. Student testing was employed as a data collection method in each of the studies using a longitudinal design, while only one cross-sectional study employed student testing as a data collection method. Telepone survey methods were not used in studies with a longitudinal design while three studies using the cross-sectional design employed telephone survey data collection methods.

TABLE C6

Data Collection Design and Methods of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	Cross-sectional Design							Longitudinal Design						
	Survey Method			Other Method				Survey Method			Other Method			
	Mail	Tele-phone	In-person	Case Study	Obser-vation	Record Review	Student Testing	Mail	Tele-phone	In-person	Case Study	Obser-vation	Record Review	Student Testing
National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited English-Proficient Students								X		X			X	X
Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children								X		X		X	X	X
National Survey of Title VII Bilingual Education Capacity Building	X			X	X									
Evaluation of the Title VII Special Population Preschool Program		X		X		X								
Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program	X	X		X										
Descriptive Study of the Chapter 1 Migrant Education Program	X		X	X		X								
Chapter 1 Services to LEP Students	X	X		X		X								
Significant Bilingual Instructional Features Study			X	X	X	X								
Delivery and Cost of Bilingual Education				X										
Children's English and Services Study	X													
Study of Bilingual Instructional Practices in Nonpublic Schools				X										

Data Collection Design and Methods of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	Cross-sectional Design							Longitudinal Design						
	Survey Method			Other Method				Survey Method			Other Method			
	Mail	Tele-phone	In-person	Case Study	Obser-vation	Record Review	Student Testing	Mail	Tele-phone	In-person	Case Study	Obser-vation	Record Review	Student Testing
Descriptive Study of the Classroom Instructional Component of ESEA Title VII	X		X	X		X								
Teaching Reading to Bilingual Children										X		X		X
National Evaluation of Services for LEP Native American Students			X	X							X			X
Descriptive Study of Exemplary Special Alternative Instructional Programs	X		X	X	X	X	X							
Innovative Approaches Research Project														
Partners for Valued Youth											X		X	X
Cheche Konnen											X	X		X
Community Knowledge			X											
Aim for the Best										X		X		X
Comparison of Effects of Language Background and SES on Achievement														X

Data Analysis

Data analysis, probably more than any other single research area, changes from the time the original design is established for a study through eventual final reporting, and usually this change is from sophisticated multivariate analysis plans to fairly straightforward tabulations. Sometimes, however, the change involves eventual use of more sophisticated methods than originally envisioned, especially if those originally planned analyses reveal little or there was a major change in data collection that resulted in not filling the original specifications. Examples of both patterns are noted in these 17 studies, with the general trend being toward simplification but with a few exceptions.

We describe data analysis in this review as a function of the type(s) of analytical methods. Analytical methods are described in terms of three basic types:

- Descriptive Analyses--Including general statistics describing central tendencies and variabilities as well as counts, frequencies, and proportions. Case studies that describe individual settings or other case unit fit into this category.
- Associative Analyses--Including relational, co-variational statistics between or among variables, but without presuming logical or causal precedence for specific variables. Comparative case study analysis methods fit into this category.
- Causal Analyses--Including associative methods, and presuming and specifying logical or causal precedence for specific variables.

The 17 studies' data analysis approaches are described in terms of their originally planned analytical methods based on their predominant data analysis approaches in Table C7.

Each study with the exception of one (i.e., Comparison of Effects of Language Background and SES on Achievement) proposed a descriptive component in the original data analysis plans. This commonality may be related back to Table C5 which categorizes the original study objectives. The implementation (process) objective was addressed by all but two studies (i.e., Children's English and Services Study and Comparison of Effects of Language Background and SES on Achievement). Nine of 16 studies reported an associative component in addition to the descriptive component in the original data analysis plans, one study reported a descriptive and causal component in the original data analysis plans (i.e., National Evaluation of Services for

LEP Native American Students), and one study reported descriptive, associative and causal components in the original data analysis plans (i.e., National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students).

TABLE C7

Original Data Analysis Plans of Federally Funded Research Concerning the Education of LEP Students

Federally Funded Study	Descriptive	Associative	Causal
National Longitudinal Study of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students	X	X	X
Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-Minority Children	X	X	
National Survey of Title VII Bilingual Education Capacity Building	X	X	
Evaluation of the Title VII Special Population Preschool Program	X		
Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program	X		
Descriptive Study of the Chapter 1 Migrant Education Program	X	X	
Chapter 1 Services to LEP Students	X	X	
Significant Bilingual Instructional Features Study	X		
Delivery and Cost of Bilingual Education	X		
Children's English and Services Study	X		
Study of Bilingual Instructional Practices in Nonpublic Schools	X	X	
Descriptive Study of the Classroom Instructional Component of ESEA Title VII	X	X	
Teaching Reading to Bilingual Children	X	X	
National Evaluation of Services for LEP Native American Students	X		X
Descriptive Study of Exemplary Special Alternative Instructional Programs	X	X	
Innovative Approaches Research Project-- Partners for Valued Youth Cheche Konnen Community Knowledge Aim for the Best	 X X X X		
Comparison of Effects of Language Background and SES on Achievement		X	

ADDENDUM 1

Since 1980, the federal government, primarily through one or another agency of the U.S. Department of Education, has funded 17 significant research studies of bilingual education practices. These 17 studies and significant research reports produced by them that were reviewed for this analysis are as follows:

Significant Bilingual Instructional Features Study

- Fisher, Charles W.; Tikunoff, William J.; Ward, Beatrice A.; Gee, Elsie W.; Phillips, Mark L. (1981). Significant Bilingual Features Instructional Features (SBIF) Study , Volume III.1, Bilingual Instructional Perspectives: Organization of Bilingual Instruction in the Classrooms of the SBIF Study. (Part I of the Study Report). . **18.1**

- Tikunoff, William J. (1985). Applying Significant Bilingual Instructional Features in the Classroom. **18.2**

Carpenter-Huffman, Polly; Samulon, Marta (1981). Case Studies of Delivery and Cost of Bilingual Education. **2.0**

Rosenthal, Alvin; Milne, Ann; Ginsburg, Alan; Baker, Keith (1981). A Comparison of the Effects of Language Background and Socioeconomic Status on Achievement Among Elementary School Students (Draft Final Report). **3.0**

O'Malley, J. Michael (1982). Children's English and Services Study: Educational Needs Assessment for Language Minority Children with Limited English Proficiency. **6.0**

Elford, George; Woodford, Protase (1982) A Study of Bilingual Instructional Practices in Nonpublic Schools. **8.0**

Descriptive Study of the Classroom Instruction Component of the ESEA Title VII Bilingual Education Program

- Cardenas, Rene F.; Rudes, Blair A. (1983). Selected Case Histories: A Descriptive Study of the Classroom Instruction Component of the ESEA Title VII Bilingual Education Program. **10.1**

- Cardenas, Rene F.; Proper, Elizabeth C.; Goldsampt, Milton R.; Baltzell, Catherine P.; Cervenka, Edward J.; Day, Harry R.; Goodson, Barbara. (1983). Technical Report: A Descriptive Study of the Classroom Instruction Component of the ESEA Title VII Bilingual Education Program. **10.2**

Teaching Reading to Bilingual Children Study

- Mace-Matluck, Betty J.; Hoover, Wesley A.; Calfee; Robert C. (1984). Teaching Reading to Bilingual Children Study: Final Report (Volume 1, Introduction). **13.1**

- Mace-Matluck, Betty J.; Hoover, Wesley A.; Calfee; Robert C. (1984). Teaching Reading to Bilingual Children Study: Final Report (Volume 2, Design of the Study). **13.2**

- Calfee, Robert C.; Hoover, Wesley A.; Mace-Matluck, Betty J. (1984). Teaching Reading to Bilingual Children Study: Final Report, (Volume 3, Measurement of Growth). **13.3**

- Mace-Matluck, Betty J.; Hoover, Wesley A.; Calfee, Robert C. (1984). Teaching Reading to Bilingual Children Study: Final Report (Volume 4, Oral Language Growth). **13.4**

- Hoover, Wesley A.; Calfee, Robert C.; Mace-Matluck, Betty J. (1984). Teaching Reading to Bilingual Children Study: Final Report (Volume 5, Reading Growth). **13.5**

- Hoover, Wesley A.; Calfee, Robert C.; Mace-Matluck, Betty J. (1984). Teaching Reading to Bilingual Children Study: Final Report (Volume 6, Instruction). **13.6**

- Hoover, Wesley A.; Calfee, Robert C.; Mace-Matluck, Betty J. (1984). Teaching Reading to Bilingual Children Study: Final Report (Volume 7, Language, Literacy, and Instruction: Integrating the Findings). **13.7**

The National Longitudinal Evaluation of the Effectiveness of Services for Language Minority Limited English Proficient Students

- Young, Malcolm B.; Shaycoft, Marion F.; Hopstock, Paul J.; Zehler, Annette M.; Ratner, Mitchell S.; Rivera, Charlene; Rudes, Blair A. (1984). LEP Students: Characteristics and School Services. Descriptive Phase Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students. **21.1**

- Young, Malcolm B.; Hopstock, Paul J.; Rudes, Blair A.; Fleischman, Howard L.; Zehler, Annette M.; Shaycoft, Marion F.; Goldsamt, Milton R.; Bauman, James E.; Burkheimer, Graham A. (1986). Instructing Children with Limited English Ability. Year 1, The Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students. Arlington, VA: Development Associates. **21.2**

- Burkheimer, Jr. G.J.; Conger, A.J.; Dunteman, G.H.; Elliott, B.G.; Mowbray, K.A. (1989). Effectiveness of Services for Language-Minority Limited-English-Proficient Students. Executive Summary. **34.2**

The National Evaluation of Services for Limited English Proficient Native American Students

- Rudes, Blair A.; Young, Malcolm B.; Shaycroft, Marion F.; Zehler, Annette M.; Day, Harry R.; Kaplan, Leesa. (1988). Instructional Services for Native American Students with Limited English Proficiency: Year One Report of the National Evaluation of Services for Limited English Proficient Native American Students. **30.1**

- Young, Malcolm B.; Rudes, Blair A.; Shaycroft, Marion F.; Hopstock, Paul J. (1988). Academic Performance of Limited English Proficient Indian Elementary Students in Reservation Schools: Year 2 Report of the National Evaluation of Services for Limited English Proficient Native American Students. **30.2**

National Assessment of Chapter 1

- Carlson, Elaine; Strang, E. William. (1988). Chapter 1 Services to Language-Minority Limited-English-Proficient Students: A Substudy of the National Assessment of Chapter 1. **32.0**

- Strang, E. William; Carlson, Elaine. (1991). Providing Chapter 1 Services to LEP Students. **40.0**

Descriptive Evaluation of the Transition Program for Refugee Children and the Emergency Immigrant Education Program

- Bateman, Peter; Cheung, Oona; Chew, Susan. (1990). Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program: Summary of the Literature Review and Federal Interviews. **37.1**

- Mertens, Jennifer; Bateman, Peter; Tallmadge, Kasten. (1990). Descriptive Evaluations of the Transition Program for Refugee Children and the Emergency Immigrant Education Program: Data Collection, Sampling, and Analysis Plan. **37.2**

Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children

- Ramirez, J. David; Yuen, Sandra D.; Ramey, Dena R. (1986). Second-Year Report: Longitudinal Study of Immersion Programs for Language-Minority Children. **23.0**

- Ramirez, J. David; Yuen, Sandra D.; Ramey, Dena R.; Pasta, David J. (1991). Final Report: Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children, (Volume I). **38.2**

- Ramirez, J. David; Pasta, David J.; Yuen, Sandra D.; Billings, David K.; Ramey, Dena R. (1991). Final Report: Longitudinal Study of Structured English Immersion Strategy, Early-Exit and Late-Exit Transitional Bilingual Education Programs for Language-Minority Children, (Volume II). **38.3**

Descriptive Study of the Significant Features of Exemplary Special Alternative Instructional Programs

- Southwest Regional Educational Laboratory (1988). Study Design Report for a Descriptive Study of the Significant Features of Exemplary Special Alternative Instructional Programs (SAIP). **33.0**

- Tikunoff, William J.; Ward, Beatrice A.; van Broekhuizen, L. David; Romera, Migdalia; Castanada, Lillian Vega; Lucas, Tamara; Katz, Anne. (1991). Final Report: A Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs. **46.2**

- Tikunoff, William J.; Ward, Beatrice A.; van Broekhuizen, L. David; Romera, Migdalia; Castanada, Lillian Vega; Lucas, Tamara; Katz, Anne. (1991). Appendix to Draft Final Report: A Descriptive Study of Signicant Features of Exemplary Special Alternative Instructional Programs, Volume 1: Report for Researchers. **46.1**

- Tikunoff, William J.; Ward, Beatrice A.; van Broekhuizen, L. David; Romera, Migdalia; Castanada, Lillian Vega; Lucas, Tamara; Katz, Anne. (1991). Appendix to the Final Report: A Descriptive Study of Significant Features of Exemplary Special Alternative Instructional Programs. **46.3**

National Survey of Title VII Bilingual Education Capacity Building Efforts

- Kim, Yungho; Lucas, Tamara. (1991). Descriptive Analysis of Bilingual Instructional Capacity Building Among Title VII Grantees: Phase I Report. National Survey of Title VII Bilingual Education Capacity Building Efforts. **47.1**

- Lucas, Tamara; Katz, Anne; Ramage, Katherine. (1992). Successful Capacity Building: An Analysis of Twenty Case Studies. **47.2**

- Kim, Yungho; Lucas, Tamara. (1992). Descriptive Analysis of Bilingual Instructional Service Capacity Building Among Title VII Grantees: Final Report. **47.3**

Descriptive Study of the Chapter 1 Migrant Education Program

- Cox, J. Lamarr; Burkheimer, Graham; Curtin, T.R.; Rudes, Blair; Iachen, Ronaldo; Strang, William; Carlson, Elaine; Zarkin, Gary; Dean, Nancy. (1992). Descriptive Study of the Chapter 1 Migrant Education Program, Volume 1: Study Findings and Conclusions. **55.1**

- Strang, William; Carlson, Elaine; Burkheimer, Graham; Cox, J. Lamarr; Curtin, T.R.; Funkhouser, Janie; Gutmann; Babette; Henderson, Allison; Moore, Mary; Muraskin, Lana. (1992). Descriptive Study of the Chapter 1 Migrant Education Program--Volume II: Summary Reports of Intensive Case Studies (Final Report). **55.2**

Innovative Approaches Research Project

- Rivera, Charlene; Zehler, Annette. (1990). Collaboration in Teaching and Learning: Findings from the Innovative Approaches Research Project. **39.7**

- Robledo, Maria del Refugio; Cardenas, Jose A.; Garcia, Yolanda M.; Montemayor, Aurelia M.; Ramos, Merci G.; Supik, Josie D.; Villareal, Abelardo. (1990). Partners for Valued Youth: Dropout Prevention Strategies for At-Risk Language Minority Students (A Handbook for Teachers and Planners). **39.1**

- Robledo, Maria del Refugio; Cardenas, Jose A.; Garcia, Yolanda M.; Montemayor, Aurelia M.; Ramos, Merci G.; Supik, Josie D.; Villareal, Abelardo. (1990). Partners for Valued Youth: Dropout Prevention Strategies for At-Risk Language Minority Students (Final Technical Report). **39.2**

- Warren, Beth; Rosebery, Ann S.; Conant, Faith. (1990). Cheche Konnen: Collaborative Scientific Inquiry in Language Minority Classrooms (Technical Report). **39.3**

- Moll, L.C.; Velez-Ibanez, C.; Greenberg, J.; Andrade, R.; Dworin, J.; Saavedra, E.; Whitmore, K. (1990). Community Knowledge and Classroom Practice: Combining Resources for Literacy Instruction (A Handbook for Teachers and Planners). **39.5**

- Moll, L.C.; Velez-Ibanez, C.; Greenberg, J.; Andrade, R.; Dworin, J.; Fry, D.; Saavedra, E.; Tapia, J.; Whitmore, K. (1990). Community Knowledge and Classroom Practice: Combining Resources for Literacy Instruction (Technical Report). **39.6**

- Ortiz, Alba A.; Wilkinson, Cheryl Y.; Robertson-Courtney, Phyllis; Kushner, Millicent I. (1991). Aim for the BESt: Assessment and Intervention Model for the Bilingual Exceptional Student (A Handbook for Teachers and Planners, Second Edition). **39.8**

- Ortiz, Alba A.; Wilkinson, Cheryl Y.; Robertson-Courtney, P.; Bergman, Alam. (1991). Aim for the BESt: Assessment and Intervention Model for the Bilingual Exceptional Student (Technical Report--Second Edition). **39.9**

- Warren, Beth; Rosebery, Ann S.; Conant, Faith; Hudicourt-Barnes, Josiane. (1991). Cheche Konnen: Collaborative Scientific Inquiry in Language Minority Classrooms (A Handbook for Teachers and Planners, Second Edition). **39.4**

Brush, Lorelei; Sherman, Renee; Herman, Rebecca; Webb, Lenore. (1993). Bilingual Beginnings: Evaluation of the Title VII Special Population Preschool Program. Final Report. **60.0**

In addition to those major studies, the federal government has supported three other research activities that are relevant to the topics in this review. These are:

Tallmadge, G. Kasten; Lam, Tony C.M.; Gamel, Nona N. (1987). Evaluation of Bilingual Education Programs for Language-Minority, Limited English Proficient Students: A Status Report with Recommnedations for Future Development (Phase I Report). **26.1**

Navarrete, Cecilia; Wilde, Judith; Nelson, Chris; Martinez, Robert; Hargett, Gary (1990). Informal Assessment in Educational Evaluation: Implications for Bilingual Education Programs. **36.0**

Meyer, Michael M.; Fienberg, Stephen E. (Eds.) (1992). Assessing Evaluation Studies: The Case of Bilingual Education Strategies. **57.0**